SALARIES 1999

ANALYSIS OF THE AMERICAN CHEMICAL SOCIETY'S 1999 COMPREHENSIVE SALARY AND EMPLOYMENT STATUS SURVEY

AMERICAN CHEMICAL SOCIETY
COMMITTEE ON ECONOMIC AND PROFESSIONAL AFFAIRS
DEPARTMENT OF CAREER SERVICES

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ACKNOWLEDGMENTS

This report presents detailed results of the 1999 ACS Comprehensive Salary and Employment Status Survey. A summary of the survey findings was published in the August 2, 1999 issue of *Chemical & Engineering News* and the August 1999 issue of *Today's Chemist at Work*.

The ACS Council Committee on Economic and Professional Affairs, chaired by Valerie Kuck, and its Subcommittee on Surveys, chaired by James Long, planned and provided general oversight of the survey and its analysis in 1999. The committee is grateful to the over 10,600 members who provided a valuable service to the profession by completing the survey questionnaire.

Mary Jordan, Senior Research Analyst, conducted this year's survey and wrote the following summary, with assistance from Kemie Smith, Program Assistant.

Jean Parr, Head
Department of Career Services

1999 Summary and Comments

Results from the 1999 Comprehensive Salary and Employment Status Survey (CS99) were mixed. Salaries for chemists rose this year, both overall and at the individual level. The unemployment rate for chemists remained unchanged at 2.3 percent, notwithstanding the low levels of overall national unemployment. The proportion of ACS members who were in postdoctoral positions declined from 2.2 percent to 2 percent. On the other hand, the proportion of members in temporary positions rose by the same amount as the decline in postdocs. The persistence of a relatively high unemployment rate for chemists reflects the rapid and constant change in professional chemical employment in the 1990s.

Salaries

All Chemists

The overall median salary for chemists1 was $68,000, an increase of 4.6 percent over the 1998 median of $65,000. Median base salaries for all degree level of chemists increased in current dollars. Salaries of chemists with M.S. and Ph.D. degrees continued to outstrip the 1.7 percent increase in the Consumer Price Index (CPI-U)[2] from March 1, 1998 to March 1, 1999. The median base salaries of bachelor degree chemists showed the lowest increase for the second year in a row at 1.7 percent, even with the CPI-U.

Table 1. Change in All Chemists' Salaries 1998-1999

Degree	*Median Salary 1999 (1998)*	*% Change from 1998 (current dollars)*	*% Change from 1998 (constant dollars)*
Bachelor's	$50,500 (49,600)	up 1.7%	even 0.0%
Master's	$61,000 (57,700)	up 5.7%	up 4.0%
Doctorate	$76,000 (73,300)	up 4.1%	up 2.4%

In general, chemists working in the private economic sector, what is generically referred to as industry, earn higher basic salaries than chemists in other economic sectors, such as government and academia. Several factors dominate in setting the level of industrial salaries. Industrial chemists involved in the manufacturing of a product tend earn higher basic salaries. Other major factors include degree level, amount of experience, amount of responsibility, and size of company. For those working in academia, rank, tenure, and contract length are some of the major factors affecting median salaries.

1 Chemist is defined in the "Technical Notes" on page 11.
2 The Consumer Price Index-Urban (CPI-U) is used as an approximation for national inflation, which was a low 1.7 percent from March 1, 1998 to March 1, 1999.

Industrial/Private Sector Chemists

Chemists working in industry at all degree levels fared very well in 1999. Industrial chemists with graduate degrees were most favored, with increases of more than triple the inflation rate. The large increases in industrial salaries, along with the large proportion of respondents who work in industry, led to the substantial increases overall for chemists in 1999.

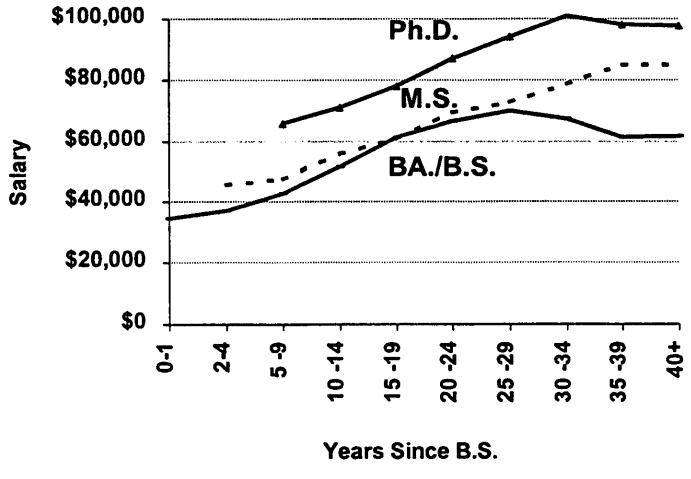
Table 2. Change in Industrial/Private Sector Chemists' Salaries 1998-1999

Degree	*Median Salary 1999 (1998)*	*% Change from 1998 (current dollars)*	*% Change from 1998 (constant dollars)*
Bachelor's	$51,090 (50,000)	up 2.2%	up 0.5%
Master's	$65,000 (61,000)	up 6.2%	up 4.5%
Doctorate	$85,000 (80,000)	up 6.3%	up 4.6%

As previously noted, chemists working in the private sector, especially the manufacturing part of the industry, are on the high end of the salary ranges. Chemists working in non-manufacturing, such as analytical and independent research labs are more closely aligned with other sector salaries, i.e. lower.

Figure 1

1999 Industrial Chemists' Salaries by Years Since BS and Degree



Source: 1999 ACS Comprehensive and Employment Status Salary Survey

Figure 1 shows 1999 salaries factored by degree and experience, as measured by years since receipt of the bachelor's degree. As expected, salaries rose continuously throughout careers except for the most experienced. Usually the upward curve flattens somewhat past 30 years of experience. However, in 1999, the late and sharp decline of bachelor's salaries and the continued increase in MS salaries are unusual. Figure 1 also shows that throughout their careers, Ph.D. chemists earn considerably more, while those with masters' and bachelor's degrees have salaries much closer to each other, except at the most experienced levels.

Academic Chemists

The salaries of academic chemists are broken down by rank and contract term. They showed increases at most ranks between 1998 and 1999. The increases were the again greatest at the lowest ranks for those academics with 11 or 12-month contracts and at the highest ranks for those with 9 or 10-month contracts. Associate professors with 11 or 12-month contracts showed losses, bringing their median salaries for 1999 down to the 1997 level for this group.

Table 3. Change in Ph.D. Academic Chemists' Salaries 1998-1999

Rank/ Contract	*Median Salary 1999 (1998)*	*% Change from 1998 (current dollars)*	*% Change from 1998 (constant dollars)*
Full 9/10	$70,000 (66,200)	up 5.7%	up 4.0%
Full 11/12	$95,500 (94,000)	up 1.6%	down 0.1%
Assoc 9/10	$48,600 (47,200)	up 3.0%	up 1.3%
Assoc 11/12	$63,000 (65,000)	down 3.1%	down 4.8%
Asst 9/10	$42,000 (41,000)	up 2.4%	up 0.7%
Asst 11/12	$56,500 (52,900)	up 6.8%	up 5.7%

Individual Chemists' Salaries

Increases in salary for chemists as a group are not the same as individual increases over a period of time. Each year, group salaries are affected by the general aging of the U.S. workforce. The sample drawn can also vary the mix of employers, degrees, and ages. However, true individual raises can be found by comparing basic salaries between March 1, 1998 and March 1, 1999 for the same person. A question asking for such information is asked in the survey. For all chemists, the 1999 median individual raise was 4.8 percent, close to the 4.6 percent overall increase for the total (group) of chemists between the 1998 results and 1999 results.

For those who worked more than one year for the same employer in 1999, individual increases were much higher for bachelor's chemists, regardless of their group's performance last year. While bachelor's chemists from this year's survey showed only a 1.7 percent increase over last year's respondents, individually, they showed a median raise of 5.3 percent for those with the same employer as last year. Industrial chemists showed increases higher than chemists working in either government or in academia, as shown in Table 4.

Also illustrated in Table 4, younger chemists, at all degree levels, tended to have higher proportional median raises than older chemists. However, in real dollars, the higher wages of older, experienced chemists most often led to higher dollar increases even with lower proportional increases. The very highest proportional increase was 9.6 percent for 20- through 29-year-olds with master's degrees, while the lowest was 3.6 percent for 60- through 69-year-olds with doctorates.

Table 4. Percent Change in Indiviual Chemists' Median Salaries 1998-1999

EMPLOYER 1998-1999	*% Chg from 1998 Bachelor's*	*% Chg from 1998 Master's*	*% Change from 1998 Doctorate*
Total	5.3%	4.7%	4.7%
Industry	5.4%	5.0%	5.0%
Government	4.0%	3.9%	4.5%
Academe	4.8%	3.9%	4.2%
AGE GROUPS 1998-1999	*% Chg from 1998 Bachelor's*	*% Chg from 1998 Master's*	*% Change from 1998 Doctorate*
20 thru 29	9.4%	9.6%	6.6%
30 thru 39	5.8%	6.1%	6.1%
40 thru 49	4.8%	4.3%	4.8%
50 thru 59	4.1%	3.9%	4.0%
60 thru 69	4.2%	3.8%	3.6%

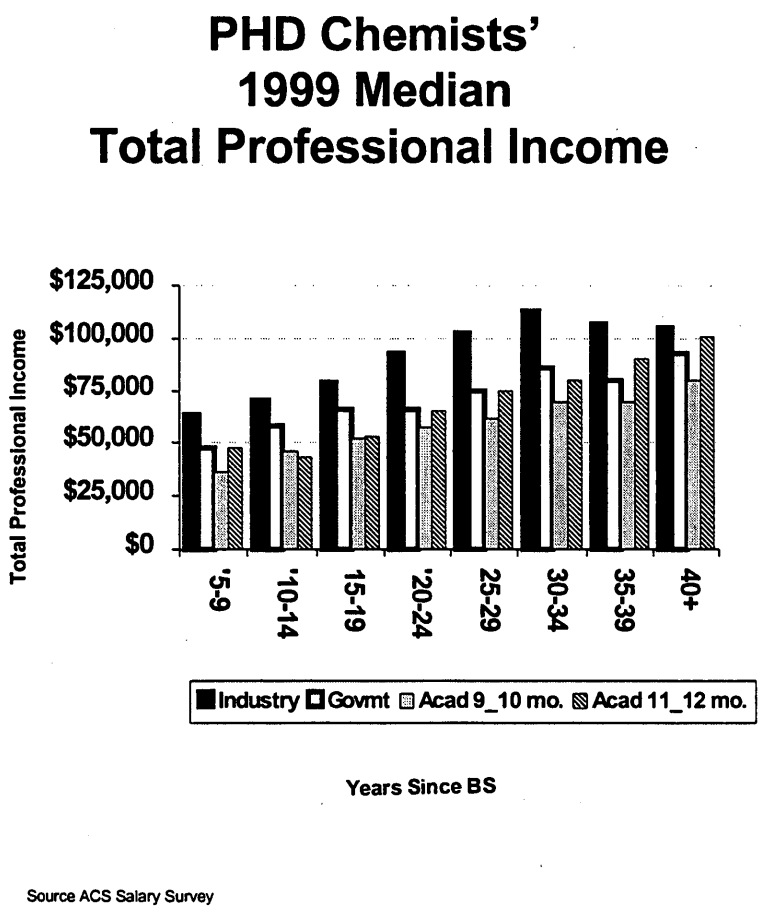
Non-Salary Income

Base salary is only one source of income for chemists. Total compensation has become increasingly complex. Among other things, health care packages, retirement benefits, and productivity rewards have increased the ways companies determine a total package. The majority of chemists also have access to other types of professional income. Consulting fees for consultants and academics and bonuses for industrial and government chemists are among the most common. Questions on the survey each year ask about the eligibility and receipt of cash bonuses and the amount of consulting fees earned during the previous year (1998).

During this period, the responding academics were far more apt to consult than chemists working in any other sector. More than a quarter of all responding academics said they were paid for consulting. Their median consulting income was $4,000, up from last year's $3,000 median. However, for the small proportion (5 percent) of industrial chemists who consult on the side, the rewards are the higher, with a $6,000 median, up from $4,000 last year's survey. The overall median hourly rate for those consulting was $100.

On the other hand, chemists working in industry were far more apt to be eligible for and receive cash bonuses than their peers working in other sectors. Of the two-thirds of industrial chemists who claimed they were eligible for bonuses, 92 percent of them received bonuses. The median bonus for industrial chemists was $5,000. While government and academia have introduced and expanded the use of bonus awards, they fall very short of equaling the proportions of bonuses awarded to chemists working in industry. Only 32 percent of government and 9 percent of academic chemists were eligible for bonuses and even fewer received them. When they did receive bonuses, government chemists had a median of $1,500 for a bonus and academics had a median bonus of $1,640.

Figure 2



Source ACS Salary Survey

Chemists' Total Professional Income

Higher basic salaries, along with expanded opportunities for additional income, continue to keep the total professional income of chemists working in the private or industrial sector ahead of those working in the other economic sectors. Although the differential was across all degree levels of chemical professionals, it is most often questioned at the Ph.D. level where academics often work 12-month contracts or have their income supplemented by additional sources, such as, consulting, summer teaching, and extra awards from research grants. Each year the survey asks for total professional income for the prior full year. Figure 4 shows that Ph.D.s working in industry consistently earned a median total professional income considerably higher than their counterparts in other major economic sectors. At the end of their careers, academics with 11 or 12-month contracts show similar incomes, but still fell below the industrial chemist. In addition, as shown in the full report of *Salaries 1998,* (p.6) industrial chemists generally had higher levels of benefits, except for sabbatical leaves, than chemists working in either government or academic sectors.

Trends in Chemists' Salaries

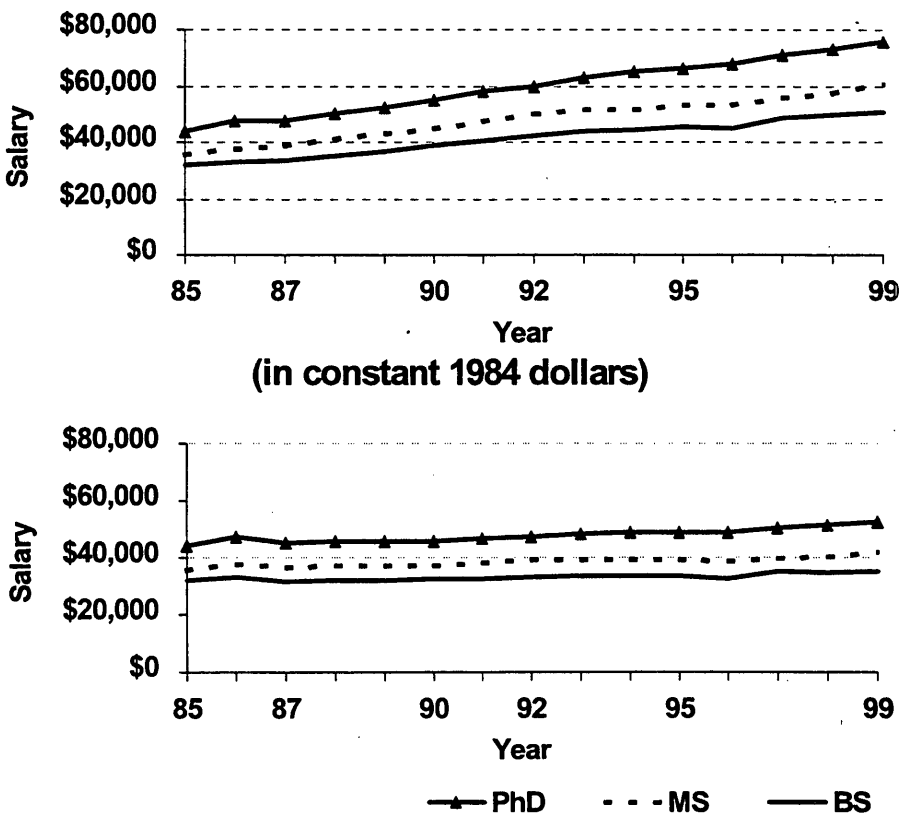
In general, chemists' median salaries continue to grow in current dollars, but perform less well when compared to 1984 constant dollar values, as shown in Figure 4. This has been especially true at the bachelor's level, where the constant dollar value of their increases has just equaled or fallen behind the inflation indicator for the past several years. In fact, except for a brief, but significant gain between 1996 and 1997, B.S. chemists showed almost no gains since 1987, when they showed a loss in constant dollars.

Chemists with graduate degrees fared better salary-wise. Both the M.S. and Ph.D. chemists continued to gain in both current and constant dollars since 1996. Chemists with doctorates have fared especially well since 1996, when both lack of gains in salaries and high unemployment were in the news. Chemists with a master's only recently began

to show salaries increasing more rapidly than bachelor's salaries. For past two years, the constant dollar estimate of median salaries for M.S. chemists have shown marked improvement, after decades of flat constant dollar earnings.

Figure 3

Chemists' Salaries in Current and Constant $s



Source: ACS Comprehensive Salary and Employment Status Survey Surveys

Employment and Unemployment

Employment Status

The persistence of an elevated unemployment rate for chemists is perhaps the most telling indicator of the rapidly evolving chemical professional employment in the 1990s. The changing demands on the chemical workforce are reflected in changing employers and types of chemistry practiced.

The employment status of chemical professionals remained much the same between 1998 and 1999. The only real gains occurred within the group identifying themselves as postdocs. The proportion of Ph.D.s in postdoc positions is often taken as an indicator of the Ph.D. job market. Between 1998 and 1999, the proportion of ACS members employed as postdocs fell to 2.0 percent, from 2.2 percent. However, a proportionately equivalent increase occurred in the number of members in part-time positions.

Figure 4

Employment Status of Chemists

	1996	1997	1998	1999
Full Time	89.4	90.5	89.8	89.4
Part Time	2.7	2.1	2.4	2.6
Post Doc	2.7	2.3	2.2	2.0
Not Employed				
Seeking	2.9	1.9	2.3	2.2
Not Seeking	2.3	0.8	0.9	1.3
Fully Retired*		2.3*	2.4*	2.5
Overall Unemployment	3.0	2.0**	2.3**	2.3**

* Fully retired is new category (1997)
** Not seeking and fully retired (not in workforce) both dropped from calculation

Source: ACS Comprehensive Salary and Employment Status Surveys

The overall ACS chemists' unemployment rate remained static this year at 2.3 percent, but, it continued to reflect the change in chemical employment, especially for those who have been employed in the traditional areas of industrial chemical employment.

Changing Employers in the Chemical Profession and Unemployment in Industry

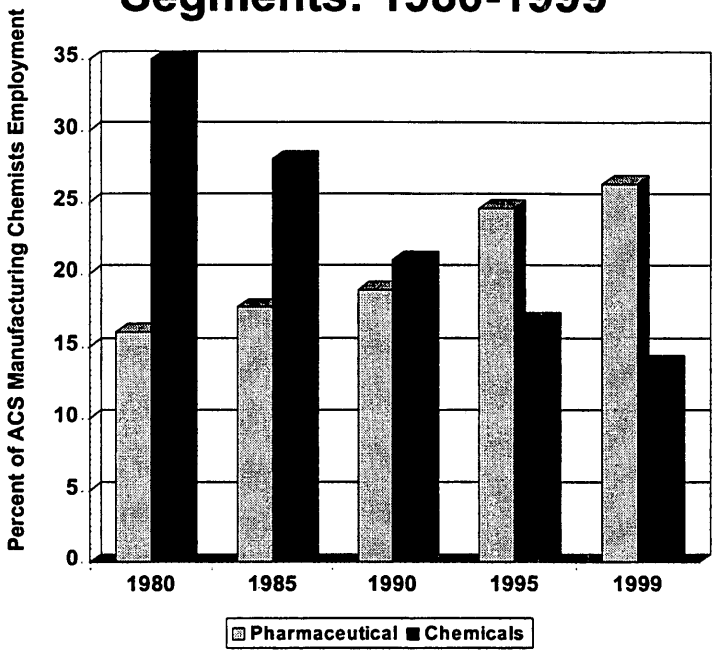
Changes seen in chemical employment over the past two decades have acceleration in the 1990s. A vivid example of such a change can be seen in Figure 5, showing growth of employment in the pharmaceutical industry and a decline in employment within traditional chemical producers.

The percentage of industrial chemists unemployed also remained the same (2.6 percent) for both years. The consistency of the unemployment rate for the past two years is due in large part to the continuing high unemployment rates for older industrial chemists, especially those who worked for traditional industrial employers that are have been undergoing rapid industrial change.

The overall industrial unemployment rate hides a large disparity in unemployment of industrial chemists by age. For those under the age of 30, the unemployment rate is 1.3 percent. For industrial chemists under age 45, the unemployment rate remains a moderate 1.8, but for those from ages 45 to 59, the unemployment rate leaps to 3.2 percent. For Industrial chemists aged 60 through 69, the rate rises to 6.4 percent.

Figure 5

Shift in Employment of ACS Members for Largest Manufacturing Segments: 1980-1999



Source: ACS Comprehensive Salary and Employment Status Surveys

Previous employment experiences of many unemployed industrial chemists also influenced the unemployment rate adversely. In 1999, petroleum chemists almost reached 5 percent unemployment, whereas those in the expanding pharmaceutical industry had the largest proportion of chemists and a low unemployment rate of 1.4 percent. Pharmaceutical chemists were only bested by those in the rubber industry, who posted a 1.2 percent unemployment rate.

The unemployment rate reflects the proportion of respondents "unemployed, but seeking employment" as of March 1, 1999. Another gauge of unemployment is from the question that asks if there was "any period of unemployment where you are seeking employment during 1998?" The number of respondents who have had some period of unemployment in the past year traditionally was the unemployment rate by a factor of less than 2.0 times the March 1st unemployment rate. Since the beginning of the 1990s, that factor had increased to more than 2.0 times the March 1st rate. In 1998, the total proportion of respondents who had a period of unemployment was 5.8 percent. This year 5.7 percent of respondents said they had a period of unemployment in the previous year.

Regional Unemployment for Chemists

The changing employment patterns of professional chemical employment were also shown by regional differences in unemployment. In the early part of the decade, some of the highest unemployment for chemists was in the Pacific Region, reaching a high of 4.2 percent in 1994. In 1999, the Pacific Region unemployment rate continued to drop, as did the East and West North Central and the East South Central regions. The most populous region, the Middle Atlantic Region, remained stable and that undoubtedly increased the stability for all chemical professionals.

Table 7. Regional Unemployment for All Chemists: 1997-1998

Region[3]	*1998*	*1999*
Pacific	2.1%	2.0%
Mountain	4.2%	3.4%
W. North Central	1.8%	1.4%
W. South Central	2.5%	3.0%
E. North Central	2.5%	2.2%
E. South Central	2.6%	1.2%
Middle Atlantic	2.1%	2.1%
South Atlantic	1.7%	2.0%
New England	2.7%	2.4%
Total Unemployment	**2.3%**	**2.3%**

Unemployment Trends

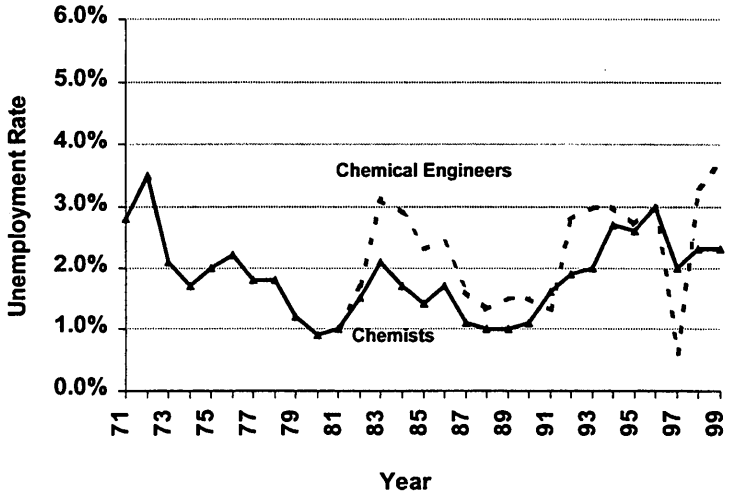
Figure 6 shows the historical unemployment trends for chemists and chemical engineers. Over time, chemical engineers have shown similar, but more volatile unemployment rates than chemists. This trend continues. This is in part because chemical engineers tend to be employed for specific projects and are more often required to move from project to project than a chemist.

Since hitting a low unemployment rate of 1.0 in 1987 and 1988, chemists' unemployment rate grew to 2.0 percent by 1993 and has stayed above 2 percent for the rest of the decade. As stated earlier, this sustained unemployment rate is likely, in large part, a product of the ongoing change in professional chemical employment over the past decade.

[3] States are listed by region on page 13.

Figure 6

Unemployment Rates for Chemists and Chemical Engineers 1971-1999



Source: ACS Salary Surveys

TECHNICAL NOTES

The Sample

The target population of the ***ACS Comprehensive Salary and Employment Status Survey*** is ACS members under the age of 70 who have U.S. mailing addresses and have neither student, retired, nor emeritus membership status. This year, a general sample was drawn from a database consisting of all members meeting the above criteria. The survey questionnaires were mailed to 20,950 members by first-class mail during the week of February 26, 1999. The second mailing consisted of a reminder postcard mailed about a week after the first mailing. A follow-up third mailing consisting of the survey questionnaire was sent to nonrespondents during the week of March 26. By the May 15th cut-off date, 10,605 usable questionnaires (51 percent of the original mailing) had been returned. The 51 percent response rate represents an increase of 3 percent over the 1998 survey. In 1998, the response rate of 48 percent represented a drop of 5 percent over 1997. This drop was thought to be partly due to the addition of a complex benefits section to the 1998 questionnaire and to the long-term and continued decline in response rates in general.

Definitions

For the purposes of the survey analysis, the following definitions were used:

Chemist: A respondent who indicated a work specialty of chemistry or biochemistry (categories 2 through 15 of Part 1, Question 3 of the questionnaire) or, if a non-chemistry work specialty (categories 16 through 19 of the same question), a degree field of chemistry or biochemistry.

Chemical Engineer: A respondent who indicated a work specialty of chemical engineering (category 1 of Part 1, Question 3 of the questionnaire).

Nonchemist: A respondent whose work specialty category is other than chemistry or chemical engineering.

Academic: Pertaining to Ph.D.s working in a college or university, i.e., a private or public institution that awards a degree of associate or higher.

Unemployed: A respondent who was not employed and was seeking employment (category 4 of Part 1, Question 4 of the questionnaire). The unemployment rate calculated to compare with the national rate, drops those "not seeking" or "fully retired" from the labor force.

Respondents indicated their employment status, base annual salaries, and ages as of March 1, 1999. The respondent's place of employment (current or most recent) determines geographic region. The listing of states by geographic regions follows this section. (p. 13)

Discrepancies Among Tables

Some pairs of tables contain totals that should be identical but are not. For example, two tables that represent information about Ph.D. respondents should show the same total number of PhDs. However, they might show different totals. This phenomenon is generally caused by missing response items in a survey. Not every respondent answers all questions all of the time. To illustrate, if one table groups the Ph.D.s according to specialty and another groups them according to work function, the totals will differ unless the number who did not indicate their specialty is the same number (or person even) that did not indicate their work function.

Comparing Salaries

Questions arise frequently about salary comparisons, such as between degrees of men and women. All such comparisons require caution. The salaries here represent the medians and means of ACS members. Most of the statistics in this report are descriptive in nature, not analytical.

Tests of significance should be performed on any salary discrepancies to see whether the observed salary differences between groups are mere chance resulting from some peculiarity of the sample itself. The significance of a difference between subpopulations depends on multiple factors. These factors include, among other things, the magnitude of the difference within the sample and between sample groups, and sample size.

Nonresponse Bias

One source of sample error may arise from a response bias. Members who respond may be different than members who do not respond. Past comparisons of ACS membership records showed no bias in terms of age, sex, employer, or geographic region. In addition, a telephone follow-up of 388 nonrespondents to the 1991 survey showed the nonrespondents' salaries were virtually the same as the respondents. The mean salary for the respondents was $57,007; for nonrespondents it was $57,982. A t-test of the difference between the mean salaries of the two groups resulted in no significant difference between the means. Student's t[4] was only 0.57 between the two groups. The percent in both groups that were unemployed was also the same -- 1.6%.

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[4]Student's t, or the distribution of t, is a test statistic that evaluates the randomness of a given distribution. In this case, the sample of the nonrespondents vs. responders of the 1991 Comprehensive Survey was tested with the Student' t of .057 showing very closely aligned groups.

GEOGRAPHIC REGIONS

Pacific

Alaska
California
Hawaii
Oregon
Washington

Mountain

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

West North Central

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

West South Central

Arkansas
Louisiana
Oklahoma
Texas

East North Central

Illinois
Indiana
Michigan
Ohio
Wisconsin

East South Central

Alabama
Kentucky
Mississippi
Tennessee

Middle Atlantic

New Jersey
New York
Pennsylvania

South Atlantic

Delaware
District of Columbia
Florida
Georgia
Maryland
North Carolina
South Carolina
Virginia
West Virginia

New England

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

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Salaries on March 1, 1999

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EMPLOYMENT AND UNEMPLOYMENT ON MARCH 1, 1998

Table 1.1.2

SALARIES of BS CHEMISTS employed FULL-TIME
by EMPLOYER TYPE and YEARS SINCE BS
1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry	Total	1551	56,303	25,088	40,000	51,090	66,711
	0-1	52	34,988	6,403	30,450	34,660	39,507
	2-4	229	37,107	7,993	31,000	37,000	42,400
	5-9	275	44,526	12,480	37,200	42,700	49,200
	10-14	222	52,697	12,332	45,000	51,490	60,000
	15-19	214	63,655	33,242	50,000	61,191	71,000
	20-24	200	68,924	20,981	52,900	66,522	80,375
	25-29	154	70,325	23,310	53,160	69,722	82,000
	30-34	104	72,063	24,107	57,055	67,247	83,840
	35-39	73	72,981	35,710	49,112	61,370	95,500
	40 or more	28	71,687	42,745	44,423	61,550	83,815
Government	Total	141	55,623	18,746	39,828	53,000	66,442
	15-19	16	54,925	18,345	43,544	51,200	62,766
	20-24	25	55,213	16,457	45,136	51,110	68,340
	25-29	32	58,622	18,055	46,270	58,426	70,740
	30-34	17	69,217	22,496	58,000	66,439	86,856
Other Nonacademic	Total	56	58,293	33,563	37,450	49,000	66,500
High School	Total	21	32,959	10,243	27,000	29,903	40,100
College or University	Total	76	36,778	14,519	25,500	36,250	48,576
	5-9	15	32,045	15,901	16,000	30,200	46,229

Note: Categories with fewer than 15 cases have been suppressed.

Table 1.1.2 **SALARIES of MS CHEMISTS employed FULL-TIME by EMPLOYER TYPE and YEARS SINCE BS 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry	Total	997	69,130	24,621	52,500	65,000	81,000
	2-4	16	44,976	10,046	35,680	45,724	54,100
	5-9	118	48,681	10,170	42,000	47,700	53,800
	10-14	155	57,554	13,695	49,500	56,000	64,764
	15-19	155	64,808	21,815	52,271	61,100	72,374
	20-24	165	72,730	20,466	59,330	69,700	82,440
	25-29	159	75,963	22,878	62,003	73,000	85,700
	30-34	125	83,142	29,433	65,000	78,695	96,000
	35-39	65	87,418	28,946	68,200	85,000	99,795
	40 or more	39	85,626	26,519	66,060	85,000	100,000
Government	Total	117	62,171	19,517	48,000	60,500	72,200
	20-24	23	58,633	11,649	48,315	60,300	65,000
	25-29	25	65,454	14,049	51,319	66,400	74,035
	30-34	26	69,008	20,556	50,238	62,359	84,229
Other Nonacademic	Total	57	61,578	31,168	42,500	55,000	73,600
High School	Total	79	47,887	14,429	36,000	48,000	56,000
	25-29	16	48,506	9,896	42,500	49,240	54,200
	30-34	17	55,390	16,630	46,000	50,000	65,000
College or University	Total	111	48,463	15,443	36,000	47,293	58,000
	5-9	16	41,685	8,938	33,500	41,500	49,400
	10-14	16	39,871	11,515	35,000	40,487	46,550
	20-24	18	44,270	13,392	31,000	44,250	56,000
	30-34	19	53,492	12,830	42,000	51,500	58,000
	35-39	17	54,053	16,465	44,250	53,286	65,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 1.1.3

SALARIES of PhD CHEMISTS employed FULL-TIME by EMPLOYER TYPE and YEARS SINCE BS
1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Industry	Total	2652	90,037	30,946	71,150	85,000	101,222
	5-9	134	65,138	10,046	60,000	65,846	72,000
	10-14	399	71,803	15,106	63,386	71,000	79,000
	15-19	550	81,405	19,804	70,000	78,000	90,000
	20-24	458	90,343	23,295	78,000	87,025	99,750
	25-29	397	97,941	28,396	82,400	94,000	110,000
	30-34	381	107,532	36,522	86,025	101,000	122,000
	35-39	243	106,850	44,460	83,640	98,280	119,818
	40 or more	90	104,822	44,981	83,200	97,850	120,000
Government	Total	340	78,014	21,094	62,823	75,427	92,556
	10-14	35	59,827	12,779	53,562	60,940	68,340
	15-19	42	69,749	14,364	61,000	68,000	80,200
	20-24	39	72,430	18,096	58,000	71,000	84,400
	25-29	56	77,380	22,330	62,437	75,000	92,188
	30-34	68	89,093	17,721	76,871	87,522	103,054
	35-39	52	81,701	21,233	65,513	83,763	99,017
	40 or more	40	90,839	18,852	75,925	92,740	104,131
Other Nonacademic	Total	155	78,654	35,338	60,000	74,500	97,000
	15-19	20	57,214	24,812	33,422	62,250	73,750
	20-24	19	80,387	29,038	68,000	77,580	100,000
	25-29	27	77,257	34,173	53,000	75,000	92,400
	30-34	37	93,379	44,601	66,000	81,000	124,000
	35-39	26	89,158	32,961	63,500	81,600	115,000
High School	Total	30	45,825	14,426	37,005	42,655	56,000
College or University	Total	1636	65,897	29,982	45,000	59,600	76,690
	5-9	62	43,865	12,998	35,000	40,000	50,400
	10-14	221	45,459	11,915	38,000	43,300	50,000
	15-19	207	51,941	17,567	40,100	48,000	58,000
	20-24	223	60,765	21,850	46,370	54,603	70,000
	25-29	201	65,615	24,854	47,000	60,000	80,000
	30-34	231	72,817	30,560	53,000	67,100	85,000
	35-39	281	79,037	29,598	59,243	72,300	95,421
	40 or more	210	88,192	40,474	64,000	81,000	104,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.1.1

SALARIES of INDUSTRIAL CHEMISTS employed FULL-TIME
by DEGREE and YEARS SINCE BS
1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS	Total	1551	56,303	25,088	40,000	51,090	66,711
	0-1	52	34,988	6,403	30,450	34,660	39,507
	2-4	229	37,107	7,993	31,000	37,000	42,400
	5-9	275	44,526	12,480	37,200	42,700	49,200
	10-14	222	52,697	12,332	45,000	51,490	60,000
	15-19	214	63,655	33,242	50,000	61,191	71,000
	20-24	200	68,924	20,981	52,900	66,522	80,375
	25-29	154	70,325	23,310	53,160	69,722	82,000
	30-34	104	72,063	24,107	57,055	67,247	83,840
	35-39	73	72,981	35,710	49,112	61,370	95,500
	40 or more	28	71,687	42,745	44,423	61,550	83,815
MS	Total	997	69,130	24,621	52,500	65,000	81,000
	2-4	16	44,976	10,046	35,680	45,724	54,100
	5-9	118	48,681	10,170	42,000	47,700	53,800
	10-14	155	57,554	13,695	49,500	56,000	64,764
	15-19	155	64,808	21,815	52,271	61,100	72,374
	20-24	165	72,730	20,466	59,330	69,700	82,440
	25-29	159	75,963	22,878	62,003	73,000	85,700
	30-34	125	83,142	29,433	65,000	78,695	96,000
	35-39	65	87,418	28,946	68,200	85,000	99,795
	40 or more	39	85,626	26,519	66,060	85,000	100,000
PhD	Total	2652	90,037	30,946	71,150	85,000	101,222
	5-9	134	65,138	10,046	60,000	65,846	72,000
	10-14	399	71,803	15,106	63,386	71,000	79,000
	15-19	550	81,405	19,804	70,000	78,000	90,000
	20-24	458	90,343	23,295	78,000	87,025	99,750
	25-29	397	97,941	28,396	82,400	94,000	110,000
	30-34	381	107,532	36,522	86,025	101,000	122,000
	35-39	243	106,850	44,460	83,640	98,280	119,818
	40 or more	90	104,822	44,981	83,200	97,850	120,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.1.2

SALARIES of MEN CHEMISTS employed FULL-TIME in INDUSTRY
by DEGREE and YEARS SINCE BS
1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS	Total	1053	59,907	27,761	42,400	54,000	72,000
	0-1	25	36,542	6,621	32,000	36,300	44,000
	2-4	116	36,446	8,339	30,000	35,480	42,524
	5-9	180	45,033	13,732	37,000	42,850	49,850
	10-14	135	53,456	12,619	45,580	52,000	61,000
	15-19	152	66,121	37,898	50,450	63,822	73,692
	20-24	149	71,526	21,054	54,470	70,000	83,500
	25-29	132	72,183	23,299	56,985	70,200	82,000
	30-34	75	75,750	25,868	59,800	74,000	88,000
	35-39	65	75,885	36,672	50,000	66,222	97,860
	40 or more	24	73,703	45,978	42,673	63,550	90,840
MS	Total	740	71,668	25,230	54,998	67,498	84,000
	5-9	75	49,461	10,414	42,000	48,000	56,000
	10-14	104	59,056	14,769	50,760	56,688	65,000
	15-19	107	67,642	23,847	53,000	63,000	76,680
	20-24	137	73,368	20,174	60,000	70,000	82,000
	25-29	119	77,223	23,607	63,250	73,000	87,000
	30-34	103	82,629	28,304	66,500	78,695	95,000
	35-39	51	91,899	30,125	70,000	88,841	110,000
	40 or more	34	88,646	26,545	75,000	89,025	100,000
PhD	Total	2276	91,832	31,889	72,000	86,278	103,000
	5-9	95	64,631	10,862	59,400	65,160	71,000
	10-14	308	72,278	14,822	64,163	71,945	79,805
	15-19	447	82,227	20,604	70,000	78,523	90,600
	20-24	405	91,002	23,835	78,000	87,768	100,000
	25-29	354	98,723	28,494	83,844	95,000	110,000
	30-34	352	108,389	36,682	87,000	101,000	123,000
	35-39	234	107,822	44,750	84,000	98,720	120,000
	40 or more	81	106,995	45,998	85,000	98,600	120,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.1.3

SALARIES of WOMEN CHEMISTS employed FULL-TIME in INDUSTRY
by DEGREE and YEARS SINCE BS
1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
BS	Total	487	48,763	15,800	37,200	46,080	57,000
	0-1	27	33,549	5,957	29,328	32,000	38,000
	2-4	110	37,626	7,552	32,000	37,050	41,230
	5-9	95	43,566	9,667	37,400	42,092	48,800
	10-14	84	51,716	11,839	44,405	51,075	58,707
	15-19	59	58,174	15,947	50,000	56,000	67,000
	20-24	50	61,788	18,893	49,000	58,400	72,200
	25-29	21	59,609	20,903	44,500	54,000	75,478
	30-34	29	62,528	15,453	51,000	62,000	66,711
MS	Total	248	61,133	20,626	46,516	56,300	71,650
	5-9	41	47,351	9,932	41,110	46,035	52,950
	10-14	50	54,518	10,786	46,900	53,500	61,000
	15-19	47	58,075	14,631	48,000	57,100	67,000
	20-24	26	68,432	22,325	54,000	60,537	82,440
	25-29	39	71,120	19,405	57,330	72,000	81,800
	30-34	20	83,198	35,463	56,915	76,881	102,500
PhD	Total	355	78,200	20,139	65,375	75,200	86,260
	5-9	39	66,371	7,693	60,000	66,000	72,000
	10-14	87	70,559	16,089	60,240	70,000	78,000
	15-19	102	77,919	15,511	68,450	76,682	86,126
	20-24	49	84,726	18,264	75,400	83,800	96,000
	25-29	36	90,699	27,194	73,430	86,055	103,300
	30-34	26	92,958	28,230	74,000	86,280	115,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.1 **SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by WORK SPECIALTY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
SPEC	Ag/Food chemistry	Total	56	51,425	19,296	35,510	50,095	62,050
	Analytical chemistry	Total	459	52,320	18,354	40,000	48,600	62,000
		2-4	69	36,545	7,788	30,800	36,200	41,000
		5-9	83	42,348	10,964	36,000	42,000	46,896
		10-14	64	52,058	11,710	44,500	51,205	58,564
		15-19	66	56,955	16,420	46,051	54,250	65,000
		20-24	52	63,314	17,914	49,900	60,725	72,100
		25-29	53	63,272	17,311	49,500	63,715	76,560
		30-34	30	63,672	18,161	50,000	62,772	73,000
		35-39	23	63,152	28,559	42,016	52,700	81,153
	Biochemistry	Total	21	68,759	47,344	41,000	54,000	79,700
	Biotechnology	Total	33	51,281	15,957	39,100	49,700	63,000
	Environmental chemistry	Total	129	53,522	20,314	40,440	50,000	63,000
		5-9	17	41,801	8,961	36,000	40,935	46,000
		10-14	28	49,758	11,053	41,330	49,900	56,357
		15-19	25	57,602	18,495	45,000	52,000	70,000
		20-24	19	66,064	27,623	48,500	55,400	74,000
	General chemistry	Total	105	61,733	47,215	40,100	52,000	70,920
		2-4	17	36,716	8,410	30,000	37,400	40,100
		5-9	15	49,548	12,350	40,000	45,100	59,000
		15-19	15	91,841	108,272	45,500	65,000	80,200
	Inorganic chemistry	Total	45	54,098	23,841	39,540	50,000	60,000
	Materials science	Total	60	62,075	22,584	44,000	57,660	77,300
	Medicinal-Pharmaceutical	Total	135	52,194	16,258	40,014	50,000	62,000
		2-4	28	39,911	7,770	32,360	40,800	45,000
		5-9	34	44,900	9,442	37,910	45,380	52,000
		10-14	27	54,734	8,609	50,000	54,000	61,000
	Organic chemistry	Total	134	57,379	25,242	41,000	50,954	66,711
		2-4	15	36,582	7,285	31,124	36,400	42,000
		5-9	31	49,635	21,246	40,000	46,080	52,500
		10-14	18	49,894	10,052	45,427	50,414	53,650
		15-19	15	62,602	14,031	55,000	63,700	69,900
		20-24	15	72,098	13,152	62,326	74,550	84,000
	Physical chemistry	Total	19	66,636	17,466	50,000	65,040	81,800

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.1 continued **SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by WORK SPECIALTY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
SPEC	Polymer chemistry	Total	184	59,214	22,274	40,750	55,825	74,000
		2-4	32	37,167	7,341	31,650	37,000	42,020
		5-9	35	45,735	10,496	38,000	42,000	52,000
		10-14	20	55,577	8,885	50,000	54,339	61,000
		15-19	33	65,904	18,342	54,300	64,000	78,000
		20-24	20	76,361	18,671	64,626	74,325	80,750
		25-29	15	88,900	23,836	70,000	88,650	102,500
	Other chemical science	Total	44	53,908	21,617	36,085	50,000	68,150
	Business Administration	Total	31	82,517	44,592	41,000	86,550	114,800
	Other nonchemistry	Total	68	60,728	24,098	38,682	60,000	72,400

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.2

**SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY
by WORK FUNCTION and YEARS SINCE BS
1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
WORK FUNCTION	Analytical services	Total	330	48,481	15,108	37,500	45,780	58,792
		2-4	44	34,665	7,278	29,000	32,820	41,000
		5-9	67	39,102	7,575	34,100	39,749	43,950
		10-14	62	50,367	11,507	42,000	49,900	56,000
		15-19	45	53,150	13,102	45,000	51,090	62,990
		20-24	35	57,856	13,545	48,500	57,000	63,500
		25-29	25	62,141	14,466	53,664	63,499	73,500
		30-34	22	62,583	20,079	50,000	63,125	74,000
		35-39	16	50,091	16,370	38,000	45,750	61,299
	Consulting	Total	27	56,626	23,052	41,600	47,400	67,000
	General mgmt	Total	104	75,772	34,749	52,084	66,975	90,250
		15-19	21	64,698	17,471	52,018	67,000	77,500
		20-24	15	69,028	21,931	53,040	62,000	90,500
		25-29	15	82,007	31,607	61,000	72,800	91,400
	Health & Safety	Total	52	60,187	18,774	48,250	54,564	71,200
	Marketing,sales	Total	107	64,973	46,362	42,000	60,500	79,082
		15-19	23	80,907	87,364	48,864	64,000	75,300
		20-24	17	81,044	16,564	71,175	75,350	89,520
	Production, QC	Total	312	50,898	17,900	37,999	48,000	62,163
		2-4	64	35,904	7,812	30,080	34,500	40,075
		5-9	69	44,530	9,348	38,000	43,500	49,000
		10-14	35	50,428	12,842	41,200	51,000	60,684
		15-19	36	62,217	18,951	51,800	60,750	75,000
		20-24	40	60,478	15,604	48,500	58,400	70,385
		25-29	28	65,320	17,789	51,250	64,853	74,200
	Applied Research	Total	373	53,618	17,487	40,100	50,500	62,354
		0-1	16	35,808	6,886	32,510	35,930	40,057
		2-4	66	38,730	6,868	33,000	38,189	44,450
		5-9	78	45,953	8,583	40,000	44,620	51,300
		10-14	58	53,215	9,183	48,000	51,900	59,000
		15-19	49	61,612	17,221	51,700	60,000	71,700
		20-24	42	64,962	13,925	52,780	64,230	75,000
		25-29	31	68,244	21,130	53,160	65,536	79,700
		35-39	16	74,079	22,627	51,950	71,866	96,500
	Basic Research	Total	71	49,743	17,375	36,000	46,200	57,250
		2-4	22	38,617	8,173	33,000	37,700	43,500
	R&D mgmt	Total	73	83,678	31,617	68,000	80,240	96,000
		20-24	16	94,736	24,170	80,020	85,900	110,000
		25-29	15	93,042	18,051	78,965	89,500	102,000
	Other function	Total	62	60,454	27,449	43,000	57,675	66,100

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.3 **SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by INDUSTRY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NONACADEMIC EMPLOYER	Analytical serv lab	Total	97	45,300	12,996	36,400	45,000	50,400
		5-9	20	36,010	6,644	31,750	35,680	40,000
		10-14	25	46,304	9,867	40,000	45,427	50,935
		15-19	16	55,343	15,479	48,250	50,200	60,200
	Other nonmanuf	Total	89	51,981	20,245	38,750	47,268	52,000
		10-14	22	51,981	20,245	38,750	47,268	52,000
	Coatings, inks, paints	Total	92	41,458	9,592	34,980	40,000	46,200
		2-4	18	37,485	6,838	30,000	38,564	40,000
		5-9	19	45,221	10,445	38,000	43,940	52,146
	Food	Total	60	36,100	6,519	29,950	37,100	40,500
		2-4	15	36,100	6,519	29,950	37,100	40,500
	Pharmaceuticals	Total	346	53,647	17,172	42,000	50,455	63,000
		0-1	20	37,535	6,343	32,000	37,500	44,098
		2-4	62	39,531	6,969	34,000	40,125	44,500
		5-9	77	46,202	8,162	41,000	45,000	50,000
		10-14	54	56,040	9,309	51,310	54,300	62,000
		15-19	47	64,440	17,202	52,500	62,354	71,000
		20-24	32	71,273	19,870	55,900	69,500	81,125
		25-29	27	66,196	17,195	52,500	67,174	76,995
		30-34	18	66,491	20,864	51,000	64,270	78,000
	Specialty chemistry	Total	151	57,447	42,905	39,487	50,000	62,444
		2-4	21	37,400	7,441	31,642	37,000	39,783
		5-9	32	46,788	22,235	36,250	43,700	47,680
		10-14	19	54,642	8,641	50,000	54,500	62,000
		15-19	21	79,572	92,001	45,400	63,700	72,000
		20-24	18	65,716	21,466	51,078	58,400	74,000
		25-29	16	70,063	26,795	51,500	56,950	87,500
	Other manufacturing	Total	199	55,972	21,693	39,700	51,925	69,500
		2-4	31	34,541	6,855	29,120	33,280	40,000
		5-9	23	42,771	9,686	37,000	41,000	50,000
		10-14	23	49,134	10,691	44,200	51,000	53,500
		15-19	25	56,922	14,746	50,000	60,000	66,950
		20-24	33	65,756	18,002	52,780	64,020	78,575
		25-29	20	74,719	26,647	60,366	68,250	80,000
		30-34	18	72,041	21,198	54,000	75,000	79,082
		35-39	15	63,596	27,042	38,000	52,700	80,100

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.4 **SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by GEOGRAPHIC REGION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
GEOGRAPHIC REGION	Pacific	Total	165	58,292	24,428	41,000	52,200	71,000
		2-4	27	37,314	8,528	31,800	35,000	42,000
		5-9	35	46,100	10,161	40,000	45,000	52,000
		10-14	26	53,931	15,492	42,500	51,689	63,000
		15-19	20	62,310	23,798	44,080	68,700	79,765
		20-24	17	78,452	23,665	60,600	80,500	86,000
	Mountain	Total	68	52,360	25,600	36,000	46,750	63,044
		5-9	20	42,279	10,154	35,050	40,550	46,750
	West North Central	Total	131	50,334	17,439	37,100	47,736	60,000
		2-4	16	35,023	7,751	29,497	34,500	39,500
		5-9	30	39,677	8,184	34,400	40,128	43,950
		10-14	25	49,392	8,680	45,000	50,000	54,000
		15-19	19	54,252	12,109	45,500	52,500	65,000
	West South Central	Total	127	58,529	24,598	41,000	54,000	70,325
		5-9	20	40,328	10,711	33,900	37,600	47,510
		20-24	23	66,381	17,949	50,000	63,684	75,000
		25-29	17	77,658	18,020	63,500	82,000	87,550
	East North Central	Total	332	57,006	32,232	40,000	51,000	66,606
		2-4	55	36,350	7,406	30,780	36,000	43,800
		5-9	50	45,317	10,399	37,997	41,500	52,500
		10-14	50	50,317	11,103	42,000	49,650	57,000
		15-19	42	71,571	65,837	50,200	60,258	69,600
		20-24	48	69,299	23,890	51,710	70,000	81,681
		25-29	33	72,733	26,729	58,658	70,500	76,000
		30-34	15	71,154	23,085	58,825	65,180	79,600
		35-39	21	73,680	31,234	52,000	65,000	97,500
	East South Central	Total	74	57,319	18,692	42,000	55,875	68,000
		20-24	15	67,161	19,732	51,078	66,744	77,952
	Middle Atlantic	Total	290	58,609	24,594	43,000	53,145	68,775
		2-4	40	39,442	7,671	34,400	40,300	44,250
		5-9	47	50,284	20,522	40,000	45,868	52,146
		10-14	42	57,297	14,052	46,500	54,925	65,000
		15-19	48	63,218	18,231	51,750	63,096	76,000
		20-24	35	71,315	20,660	53,090	65,870	82,000
		25-29	34	66,868	18,099	53,000	65,268	76,995
		30-34	18	60,917	19,883	53,520	62,241	75,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.4 continued **SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by GEOGRAPHIC REGION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
GEOGRAPHIC REGION	South Atlantic	Total	241	55,253	20,462	40,800	51,000	65,000
		2-4	34	37,550	8,627	30,659	36,825	42,000
		5-9	48	44,006	9,431	37,639	42,796	47,750
		10-14	35	53,676	12,120	46,000	53,000	61,000
		15-19	38	61,100	17,728	51,000	58,025	72,000
		20-24	31	69,335	17,704	54,000	66,300	80,000
		25-29	19	71,003	21,911	53,000	70,000	90,000
		30-34	17	73,477	21,072	57,710	65,500	89,500
	New England	Total	109	55,206	23,064	39,783	49,500	63,000
		2-4	25	39,120	8,576	35,020	38,500	44,800
		5-9	16	43,695	7,199	38,425	46,540	48,400

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.5 **SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by TOTAL SUBORDINATES and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
TOTSUP	None	Total	32	48,635	14,823	36,693	48,180	57,500
	1-2	Total	425	51,164	18,782	38,000	48,500	60,850
		0-1	16	34,630	6,806	29,600	32,510	41,050
		2-4	74	36,164	6,924	31,500	35,800	40,100
		5-9	76	44,565	15,654	38,250	42,046	49,125
		10-14	65	51,093	10,418	45,000	51,000	56,000
		15-19	52	58,677	17,049	51,350	59,700	65,903
		20-24	53	60,233	14,609	50,000	59,100	70,000
		25-29	27	65,629	20,109	45,800	65,000	82,376
		30-34	33	62,855	16,908	50,256	62,184	70,000
		35-39	20	51,991	18,038	38,000	49,100	61,099
	3-9	Total	1027	57,046	26,132	40,691	51,756	68,000
		0-1	35	35,135	6,401	30,000	35,402	40,014
		2-4	145	37,472	8,525	30,800	37,000	43,800
		5-9	190	44,153	10,873	37,000	42,650	48,800
		10-14	146	53,101	12,420	45,427	51,573	60,000
		15-19	148	65,270	38,156	50,000	63,132	72,192
		20-24	131	71,406	21,930	54,000	70,325	82,000
		25-29	106	71,165	23,950	54,500	69,722	80,000
		30-34	63	72,442	22,369	58,000	70,200	85,000
		35-39	48	79,167	37,640	52,625	75,325	98,500
		40 or more	15	57,294	22,203	41,500	51,000	68,500
	10-14	Total	59	79,341	28,525	59,000	72,800	100,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.2.6 **SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by EMPLOYER SIZE and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
EMPLOYER SIZE	Less than 50	Total	155	51,578	26,815	35,000	45,000	60,000
		5-9	27	39,054	8,245	32,500	39,000	44,400
		10-14	25	48,242	12,267	40,000	46,800	59,000
		15-19	23	54,154	15,247	43,779	58,900	67,500
		20-24	20	56,878	21,917	41,851	48,628	66,900
	50 to 99	Total	92	57,810	50,358	37,499	46,000	62,000
		2-4	22	34,635	7,513	30,000	34,140	40,000
		5-9	16	42,109	7,309	36,999	41,645	48,500
		10-14	15	50,140	11,860	44,000	49,000	55,000
	100 to 499	Total	293	52,826	24,279	36,608	48,682	60,500
		2-4	49	36,065	7,575	30,780	35,000	40,000
		5-9	63	40,642	9,921	34,000	38,000	43,400
		10-14	30	53,389	13,181	48,000	50,789	54,600
		15-19	40	55,593	17,488	44,502	52,575	66,700
		20-24	32	65,682	21,797	51,503	60,183	75,276
		25-29	30	68,026	35,050	42,000	61,002	80,000
		30-34	15	71,711	20,483	50,256	69,864	85,500
		35-39	21	65,021	31,750	49,112	54,800	66,222
	500 to 2,499	Total	284	54,211	21,528	38,550	49,897	63,792
		2-4	49	35,173	7,249	29,000	35,020	38,750
		5-9	47	47,979	20,685	38,000	43,185	50,455
		10-14	40	53,353	12,543	46,750	52,000	59,600
		15-19	44	62,242	18,796	50,000	57,875	73,000
		20-24	30	61,237	21,545	46,700	53,520	73,672
		25-29	29	65,583	24,339	49,000	62,000	72,000
		30-34	21	69,411	19,095	58,500	65,000	79,082
	2,500 to 9,999	Total	256	57,529	20,627	43,823	53,365	67,400
		2-4	34	38,866	9,344	31,200	37,300	44,800
		5-9	39	46,112	9,172	40,000	45,100	52,000
		10-14	43	51,220	13,399	43,800	51,000	54,600
		15-19	38	59,673	14,484	50,500	59,568	66,500
		20-24	38	73,516	19,362	56,000	71,200	85,000
		25-29	23	69,542	12,337	60,100	67,000	78,965
		30-34	17	81,735	28,196	62,000	75,000	95,000
	10,000 to 24,999	Total	181	62,123	22,891	48,660	60,000	72,000
		5-9	31	47,365	10,135	41,000	45,760	52,000
		10-14	32	54,895	11,766	50,000	52,986	61,000
		15-19	26	69,562	12,089	63,744	67,750	78,000
		20-24	34	72,913	15,807	62,326	71,088	78,000
		25-29	23	69,951	16,970	58,658	70,500	77,090

Note: Categories with fewer than 15 cases have been suppressed.

ble 2.2.6 continued

SALARIES of BS CHEMISTS employed FULL-TIME in INDUSTRY by EMPLOYER SIZE and YEARS SINCE BS 1999 ACS Salary Survey

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
EMPLOYER SIZE	25,000 or more	Total	276	59,960	19,561	44,178	57,855	72,100
		2-4	43	40,749	6,510	36,200	41,000	45,000
		5-9	49	47,059	9,698	42,000	45,868	51,240
		10-14	35	56,069	10,132	51,000	55,600	63,704
		15-19	31	66,403	16,706	57,000	65,000	74,000
		20-24	38	76,974	17,234	66,800	74,175	82,000
		25-29	28	78,316	17,676	65,445	75,239	92,250
		30-34	29	72,657	16,356	63,360	70,200	80,400

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.3.1 **SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY by WORK SPECIALTY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
SPEC	Ag/Food chemistry	Total	306	63,995	20,776	49,200	60,000	76,896
		5-9	44	46,126	10,112	39,825	44,796	51,476
		10-14	44	55,435	12,014	47,450	55,500	62,050
		15-19	43	58,982	14,531	48,000	57,433	66,000
		20-24	55	62,339	16,193	50,835	59,500	69,800
		25-29	50	71,249	17,112	60,000	70,450	83,564
		30-34	33	76,882	22,871	66,500	76,896	86,213
		35-39	21	85,335	29,403	63,000	87,000	97,500
	Biochemistry	Total	15	71,547	23,891	53,500	64,000	85,550
	Biotechnology	Total	21	74,340	29,369	62,500	70,000	77,800
	Environmental chemistry	Total	81	68,067	21,195	50,200	66,032	81,200
		15-19	20	60,678	16,341	47,350	53,350	70,400
		25-29	16	75,155	15,917	68,916	79,000	85,496
	General chemistry	Total	27	70,949	28,566	54,000	66,000	80,000
	Inorganic chemistry	Total	19	75,645	25,615	56,000	74,000	100,000
	Materials science	Total	46	70,903	20,057	58,000	70,483	86,000
	Medicinal-Pharmaceutical	Total	120	62,945	20,482	49,710	57,215	70,000
		5-9	31	48,613	5,309	45,000	49,000	51,850
		10-14	31	56,996	14,882	50,003	54,432	63,000
		15-19	20	63,101	13,303	55,000	59,262	67,627
	Organic chemistry	Total	107	67,455	22,614	53,000	65,000	78,000
		5-9	15	51,398	10,046	42,000	52,200	62,329
		10-14	24	62,879	18,009	50,450	58,050	70,150
		15-19	16	62,395	15,047	55,750	66,000	71,500
		25-29	17	78,485	19,194	69,800	80,000	90,000
	Polymer chemistry	Total	119	75,746	26,214	60,000	70,000	88,000
		15-19	23	75,806	37,024	53,000	65,940	87,000
		20-24	29	78,480	20,242	64,000	75,000	85,000
		25-29	16	74,613	19,577	66,391	70,335	75,500
		30-34	19	91,313	23,660	67,132	97,000	107,880
	Other chemical science	Total	35	71,794	23,427	55,995	74,052	87,190
	Business administration	Total	28	100,755	46,112	68,120	92,500	124,900
	Law	Total	15	70,378	22,398	53,205	67,980	79,800
	Other nonchemistry	Total	41	78,714	28,465	57,200	72,374	91,229

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.3.2 **SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY by WORK FUNCTION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
WORK FUNCTION	Analytical services	Total	167	61,413	18,857	47,803	60,000	70,000
		5-9	21	41,674	5,769	38,000	41,000	45,500
		10-14	25	56,824	11,650	47,900	56,000	64,709
		15-19	30	55,821	11,458	48,700	55,400	61,100
		20-24	26	62,204	12,623	54,000	61,095	69,700
		25-29	29	66,174	14,173	58,925	67,417	77,600
		30-34	15	73,239	15,364	63,000	70,010	82,000
	Consulting	Total	20	66,081	16,917	55,500	65,516	77,500
	General mgmt	Total	65	92,326	36,729	65,000	85,000	108,000
	Health & Safety	Total	35	77,977	24,009	58,900	78,754	89,500
	Other function	Total	674	68,836	23,592	52,271	65,000	80,340
		5-9	89	49,986	10,321	43,580	48,200	56,000
		10-14	107	56,402	13,072	49,500	55,775	63,000
		15-19	103	66,219	21,685	53,000	64,100	74,600
		20-24	116	73,421	21,351	59,415	70,585	82,920
		25-29	97	77,610	22,446	65,040	73,300	90,000
		30-34	80	81,922	25,885	65,000	80,400	96,600
		35-39	42	85,132	24,261	70,000	84,943	95,000
		40 or more	27	86,704	27,762	64,400	82,944	100,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.3.3

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY by INDUSTRY and YEARS SINCE BS 1999 ACS Salary Survey

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NONACADEMIC EMPLOYER	Analytical serv lab	Total	42	65,063	26,907	46,800	60,000	74,205
	Contract res firm	Total	29	60,985	21,282	43,200	55,000	73,500
	Other nonmanuf	Total	76	65,358	24,768	47,566	61,805	77,050
		25-29	16	68,850	24,842	54,706	71,900	77,410
		30-34	14	76,358	39,987	48,000	62,300	85,000
	Aerospace	Total	15	70,128	22,183	52,176	65,000	92,331
	Ag chemicals	Total	41	65,481	22,296	49,870	60,000	76,000
	Basic chemicals	Total	27	73,247	23,953	58,800	70,000	85,000
	Coatings, inks, paints	Total	46	68,475	22,815	55,000	67,000	82,139
	Electronics/semiconductors	Total	24	69,351	20,281	55,000	70,483	84,000
	Food	Total	28	67,073	27,978	46,250	64,789	83,500
	Instruments	Total	28	66,986	23,774	53,290	59,900	78,850
	Medical devices	Total	28	73,864	30,452	45,550	76,280	84,500
	Petroleum	Total	26	71,721	22,419	58,925	65,750	85,700
	Pharmaceuticals	Total	287	66,908	22,298	52,200	61,000	76,896
		5-9	52	50,270	7,770	45,959	49,200	56,000
		10-14	66	58,272	13,875	51,000	55,988	63,648
		15-19	49	63,297	17,769	53,400	59,300	71,000
		20-24	35	75,149	22,398	57,000	72,000	85,000
		25-29	43	78,613	22,588	65,000	76,000	84,900
		30-34	20	82,346	13,386	74,688	84,815	91,100
	Plastics	Total	45	72,749	26,970	59,330	68,000	81,380
	Soaps	Total	44	73,626	21,200	57,250	70,000	81,950
	Specialty chems	Total	79	77,414	25,665	64,000	75,000	94,000
		20-24	17	76,955	14,311	66,000	75,000	87,500
		25-29	21	82,789	25,375	72,790	77,500	94,000
	Other manufacturing	Total	87	71,585	28,590	54,000	65,000	86,000
		10-14	16	58,619	13,198	51,500	56,738	65,000
		20-24	20	72,007	16,923	57,327	73,426	85,000
		25-29	15	77,164	26,354	60,000	76,500	95,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.3.4 **SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY by GEOGRAPHIC REGION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
GEOGRAPHIC REGION	Pacific	Total	120	67,311	20,968	50,440	62,650	81,000
		5-9	20	52,577	13,660	45,709	48,400	54,200
		10-14	17	55,934	12,438	47,000	55,000	56,500
		15-19	16	67,540	19,580	53,500	64,000	81,000
		20-24	20	75,970	19,904	62,250	73,400	86,520
		25-29	17	82,110	26,673	71,300	76,000	102,000
		30-34	17	67,624	18,159	54,800	62,800	85,000
	Mountain	Total	32	55,864	14,500	46,950	56,200	65,000
	West North Central	Total	64	64,093	24,174	49,099	57,570	72,000
		10-14	15	58,990	10,781	50,000	56,200	64,709
	West South Central	Total	60	69,056	25,027	48,925	65,000	81,900
	East North Central	Total	208	68,105	20,775	53,350	65,520	78,535
		5-9	19	47,809	8,867	42,000	48,000	56,300
		10-14	28	56,110	10,243	52,350	54,975	63,000
		15-19	32	63,948	14,483	53,098	62,500	76,340
		20-24	35	72,207	18,335	56,500	68,942	80,400
		25-29	42	74,744	16,778	65,000	72,450	82,100
		30-34	26	73,945	21,792	56,900	72,990	86,000
	East South Central	Total	25	68,344	27,117	46,800	70,000	82,992
	Middle Atlantic	Total	253	73,785	27,057	54,300	70,000	86,500
		5-9	31	51,075	10,374	44,300	50,400	56,100
		10-14	33	60,424	15,466	50,003	56,000	66,000
		15-19	43	72,079	31,690	55,500	67,500	78,000
		20-24	41	72,585	21,712	59,330	67,980	82,000
		25-29	43	82,997	28,225	62,192	80,000	95,000
		30-34	27	94,707	24,298	82,000	88,400	99,700
		35-39	17	85,616	24,122	67,000	90,000	103,000
	South Atlantic	Total	148	67,334	23,085	52,500	63,000	77,250
		10-14	29	58,563	13,110	49,500	57,200	65,000
		15-19	21	52,446	10,110	48,000	53,000	60,000
		20-24	28	72,978	21,084	60,000	71,000	82,700
		30-34	24	83,972	29,645	64,000	77,448	101,500
	New England	Total	76	72,221	32,482	54,300	64,000	79,105
		15-19	16	66,776	19,271	53,650	64,000	71,750

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.3.5 **SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY by TOTAL SUBORDINATES and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
TOTSUP	1-2	Total	306	62,039	20,377	49,200	57,950	71,640
		5-9	47	47,951	7,444	43,000	48,000	52,950
		10-14	53	53,553	12,887	45,000	53,000	61,000
		15-19	58	64,539	25,161	53,142	59,112	69,140
		20-24	46	65,887	13,058	57,000	68,219	75,060
		25-29	35	68,484	21,706	55,000	69,800	80,000
		30-34	33	69,374	25,501	53,000	68,543	82,400
	3-9	Total	643	70,616	23,025	54,000	67,100	85,000
		5-9	68	49,267	11,817	41,830	46,018	56,000
		10-14	93	58,705	12,912	52,200	56,000	65,000
		15-19	92	64,951	19,180	52,250	63,000	73,500
		20-24	113	74,319	21,322	60,000	70,000	87,000
		25-29	115	76,122	19,869	63,250	73,000	86,000
		30-34	84	84,278	23,284	69,760	81,910	98,192
		35-39	46	88,766	27,928	72,000	88,016	103,000
		40 or more	23	82,842	24,148	60,500	85,000	100,000
	10-14	Total	28	90,381	38,748	60,500	80,800	105,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.3.6

SALARIES of MS CHEMISTS employed FULL-TIME in INDUSTRY by EMPLOYER SIZE and YEARS SINCE BS 1999 ACS Salary Survey

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
EMPLOYER SIZE	Less than 50	Total	80	69,253	31,782	46,368	60,680	79,500
	50 to 99	Total	47	61,399	24,951	46,900	54,000	69,800
	100 to 499	Total	149	64,638	25,435	48,000	57,604	73,000
		10-14	27	52,584	13,127	46,000	50,000	56,000
		15-19	18	59,108	20,000	46,597	54,500	67,500
		20-24	24	62,301	18,252	48,607	59,000	68,500
		25-29	26	73,102	24,952	56,100	66,520	91,000
		30-34	19	82,869	37,768	63,000	75,000	86,133
	500 to 2,499	Total	173	68,037	22,105	52,000	63,250	81,000
		5-9	28	48,729	9,566	42,000	47,000	54,580
		10-14	21	62,226	16,008	54,000	58,000	65,000
		15-19	26	65,009	17,244	52,000	62,580	80,500
		20-24	30	70,703	15,484	59,330	69,240	81,000
		25-29	21	70,420	19,253	56,160	70,257	76,500
		30-34	25	83,231	27,182	62,800	77,200	96,000
		35-39	12	83,589	26,743	72,500	82,300	90,650
	2,500 to 9,999	Total	181	68,850	24,112	54,320	65,000	78,754
		5-9	22	51,820	11,152	46,512	48,550	57,200
		10-14	27	57,776	11,475	47,000	56,300	65,000
		15-19	27	71,690	34,045	54,000	67,000	78,000
		20-24	42	73,712	20,785	60,000	69,600	82,000
		25-29	25	69,070	17,427	60,550	68,900	82,139
		30-34	20	75,628	26,741	60,088	70,275	80,348
	10,000 to 24,999	Total	125	73,105	23,233	57,844	70,000	85,000
		10-14	20	57,347	10,106	52,850	57,500	64,632
		15-19	18	65,282	14,828	55,910	60,846	72,500
		20-24	21	74,216	10,528	68,000	72,800	82,440
		25-29	25	83,672	25,998	70,000	77,600	100,000
		30-34	16	85,745	29,537	73,148	86,357	93,230
	25,000 or more	Total	237	72,539	23,573	56,300	70,000	84,408
		5-9	26	50,128	7,361	46,000	50,200	56,100
		10-14	41	60,389	14,839	53,640	58,100	68,640
		15-19	41	65,669	19,346	54,000	65,000	72,000
		20-24	27	77,526	18,506	61,190	77,300	87,000
		25-29	45	80,889	22,194	70,800	78,500	85,700
		30-34	28	89,341	22,449	72,240	90,050	100,350

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.1 **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by WORK SPECIALTY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
SPEC	Ag/Food chemistry	Total	93	90,514	36,328	69,000	85,000	102,000
		15-19	15	64,173	9,304	57,641	64,950	69,696
		20-24	26	84,525	21,864	72,000	84,200	97,000
		30-34	15	126,183	63,615	99,282	113,500	125,903
	Analytical chemistry	Total	421	83,712	25,993	68,450	80,000	94,500
		5-9	20	63,188	7,267	59,231	65,000	67,500
		10-14	61	70,625	13,904	60,000	71,000	79,000
		15-19	93	78,637	18,402	68,034	74,500	85,000
		20-24	81	83,809	19,450	72,600	83,000	93,400
		25-29	76	88,623	22,468	73,890	87,400	103,300
		30-34	44	97,348	24,440	82,925	97,500	113,610
		35-39	33	97,714	50,008	77,000	92,000	104,000
	Biochemistry	Total	66	87,136	29,641	67,000	78,644	103,860
		30-34	16	98,747	37,486	74,644	92,618	118,000
	Biotechnology	Total	129	87,861	29,611	68,500	83,000	100,000
		10-14	28	73,735	11,120	67,250	73,298	80,000
		15-19	33	83,133	22,509	70,320	76,500	91,824
		20-24	27	96,042	26,256	81,000	91,000	108,000
	Clinical chemistry	Total	22	85,091	23,032	68,347	82,000	93,000
	Environmental chemistry	Total	74	82,438	28,250	67,606	80,000	95,800
		30-34	21	92,813	25,786	72,563	88,800	110,000
	General chemistry	Total	31	99,576	27,414	75,700	98,280	120,000
	Inorganic chemistry	Total	85	84,564	28,771	68,402	78,000	94,500
		15-19	16	75,459	17,032	64,900	71,000	76,000
		30-34	17	97,797	22,108	83,200	94,000	108,500
	Materials science	Total	156	89,727	31,480	70,000	84,518	99,800
		10-14	27	70,410	13,269	64,000	68,068	77,000
		15-19	37	78,401	14,257	72,000	77,999	85,000
		20-24	23	89,551	18,316	72,000	88,800	101,000
		25-29	22	99,826	32,306	84,036	90,040	104,000
		30-34	22	123,920	38,395	97,310	111,560	145,000
	Medicinal-Pharmaceutical	Total	385	94,840	33,582	75,000	87,731	106,308
		5-9	24	67,926	8,236	64,556	70,000	73,000
		10-14	79	77,284	14,466	70,000	77,525	83,500
		15-19	101	91,824	25,649	74,465	87,000	102,216
		20-24	77	100,779	30,652	81,100	93,000	110,800
		25-29	40	99,579	26,133	81,996	97,300	112,214
		30-34	33	124,756	51,068	96,500	116,000	148,000
		35-39	27	111,290	41,795	87,000	105,000	123,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.1 continued **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by WORK SPECIALTY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
SPEC	Organic chemistry	Total	399	90,450	31,165	71,500	85,271	102,000
		5-9	15	66,813	11,858	58,600	65,000	73,000
		10-14	60	66,989	11,950	60,000	67,300	74,900
		15-19	72	78,609	14,697	69,840	78,965	86,850
		20-24	67	87,680	16,032	78,000	87,174	98,100
		25-29	61	97,902	23,131	85,560	97,000	108,000
		30-34	65	100,382	24,721	86,000	99,500	113,000
		35-39	45	116,801	48,921	88,150	103,000	135,000
	Physical chemistry	Total	114	89,306	23,113	74,330	85,260	97,500
		15-19	25	77,180	15,079	70,000	74,330	84,000
		20-24	16	86,162	15,462	79,850	87,530	93,700
		25-29	21	93,987	20,099	84,000	90,200	103,000
		30-34	16	110,397	29,756	88,260	98,250	136,313
	Polymer chemistry	Total	370	88,617	25,839	72,000	85,050	99,000
		5-9	16	67,946	8,970	62,399	67,440	71,500
		10-14	57	68,030	9,762	63,000	68,500	73,500
		15-19	69	81,086	15,481	72,800	80,000	87,000
		20-24	55	85,591	16,721	74,750	86,769	95,483
		25-29	53	101,045	20,843	88,150	96,300	110,000
		30-34	61	100,725	24,796	84,600	95,555	109,000
		35-39	37	103,506	41,112	83,000	97,000	107,340
		40 or more	22	99,615	34,289	75,000	93,200	130,000
	Other chemical science	Total	74	90,463	23,637	72,870	87,650	104,000
		25-29	16	96,383	20,296	81,922	94,972	111,500
		30-34	16	108,735	27,976	84,303	104,500	129,000
	Business Administration	Total	78	115,936	50,332	87,050	105,000	126,000
		15-19	20	93,671	17,649	83,000	95,330	107,500
		30-34	16	153,111	44,080	120,500	146,540	185,900
	Computer science	Total	35	86,207	28,471	65,000	84,000	102,000
	Law	Total	18	94,820	24,775	79,000	94,250	112,000
	Other nonchemistry	Total	99	96,162	38,823	72,000	87,452	120,000
		20-24	15	101,288	34,993	82,000	86,112	104,000
		25-29	20	107,484	23,188	88,500	109,750	124,420
		35-39	15	109,807	65,338	47,300	112,799	175,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.2 **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by WORK FUNCTION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
WORK FUNCTION	Analytical services	Total	207	77,285	19,117	65,000	76,500	90,000
		5-9	18	61,911	9,782	57,000	64,500	68,500
		10-14	32	68,302	15,609	60,000	66,550	73,780
		15-19	36	75,578	11,626	66,717	73,000	81,830
		20-24	37	77,891	16,510	72,000	82,000	90,246
		25-29	38	84,614	17,900	70,326	90,100	99,700
		30-34	23	84,886	18,505	70,000	83,520	97,600
		35-39	16	81,625	22,872	71,363	85,500	96,029
	Chemical info	Total	19	89,737	31,952	63,342	85,000	110,000
	Computers	Total	30	81,942	25,851	66,500	77,500	93,400
	Consulting	Total	36	92,043	51,242	71,000	77,208	96,100
	General mgmt	Total	116	116,654	56,256	84,650	101,200	131,000
		25-29	21	122,209	65,275	93,000	105,000	135,000
		30-34	26	121,645	55,935	83,000	109,750	146,000
		35-39	25	115,429	58,179	78,000	98,000	140,000
	Health & Safety	Total	42	100,577	27,564	82,000	99,908	120,000
	Marketing,sales	Total	99	91,437	23,278	76,000	90,000	105,000
		15-19	24	87,565	20,820	69,824	86,350	107,500
		20-24	16	86,720	8,538	82,710	87,025	92,172
		25-29	17	89,179	19,850	75,000	85,000	90,000
		30-34	16	110,446	25,123	87,733	105,500	124,055
	Patents	Total	25	98,691	23,731	86,000	98,500	116,000
	Production, QC	Total	135	78,981	22,659	66,000	76,588	89,397
		10-14	24	69,821	10,656	63,350	71,445	76,644
		15-19	27	73,651	20,887	62,000	72,800	84,920
		20-24	23	77,430	21,599	65,000	79,000	89,324
		25-29	15	86,533	13,830	74,500	82,800	95,000
		30-34	21	82,710	22,590	68,347	82,200	104,000
	Applied Research	Total	1170	81,990	20,110	69,868	79,303	92,008
		5-9	72	64,629	9,402	59,481	65,575	71,500
		10-14	218	70,542	10,807	63,900	70,950	77,600
		15-19	290	76,863	14,135	69,000	75,150	84,460
		20-24	206	84,816	15,262	74,750	83,500	95,000
		25-29	136	90,280	17,971	80,000	89,155	100,825
		30-34	145	97,726	25,136	84,000	94,500	108,000
		35-39	74	92,065	29,163	76,000	91,754	102,024
		40 or more	29	99,091	25,483	85,000	95,000	113,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.2 continued **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by WORK FUNCTION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
WORK FUNCTION	Basic Research	Total	231	87,107	22,359	72,000	84,600	99,600
		5-9	21	69,117	7,760	63,000	69,000	72,870
		10-14	49	71,470	14,236	65,000	70,000	79,000
		15-19	43	81,729	16,901	72,000	82,203	95,000
		20-24	45	89,472	17,502	78,000	92,000	98,800
		25-29	28	98,670	22,608	82,050	97,113	111,727
		30-34	23	109,985	20,724	91,000	106,000	128,000
		35-39	19	100,332	17,892	89,000	95,000	114,366
	R&D mgmt	Total	465	113,029	36,922	88,383	106,000	128,000
		10-14	37	84,235	24,697	70,500	79,500	96,600
		15-19	82	97,601	26,049	80,000	88,987	110,000
		20-24	90	108,733	29,527	88,000	105,000	120,000
		25-29	92	114,211	24,836	97,230	110,781	126,500
		30-34	95	130,749	42,126	100,750	120,320	148,080
		35-39	46	137,539	52,035	98,000	119,500	163,000
		40 or more	18	112,542	30,338	94,500	110,000	122,400
	Other function	Total	61	92,109	40,967	70,000	86,112	112,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.3 **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by INDUSTRY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NONACADEMIC EMPLOYER	Analytical serv lab	Total	41	68,951	27,902	50,000	67,250	82,000
	Contract res firm	Total	106	78,048	29,493	60,000	71,742	86,500
		10-14	19	64,971	16,296	52,000	60,000	72,000
		15-19	22	70,134	15,811	60,000	70,180	75,000
		20-24	17	72,196	20,328	59,500	72,426	79,200
		25-29	18	92,175	45,307	60,000	77,500	88,200
	Other nonmanuf	Total	115	88,591	48,038	63,800	78,000	96,500
		10-14	22	69,095	24,170	52,000	69,500	75,000
		15-19	18	71,446	21,149	49,800	71,000	78,000
		25-29	19	82,134	23,132	70,075	81,350	85,000
		30-34	16	92,184	35,659	66,175	96,100	112,000
		35-39	17	116,484	78,503	84,000	96,000	126,000
	Aerospace	Total	37	81,336	16,243	70,000	79,524	96,980
	Ag chemicals	Total	105	91,154	33,594	73,000	86,800	100,000
		15-19	16	71,388	10,806	64,725	67,848	79,400
		20-24	24	87,697	17,593	77,148	85,050	97,000
		25-29	24	105,472	58,166	84,000	91,350	104,345
		30-34	15	107,052	20,744	92,000	104,000	125,903
	Basic chemicals	Total	121	90,391	21,340	75,930	86,000	103,140
		15-19	19	82,116	22,433	64,800	79,270	91,263
		20-24	27	88,829	15,563	77,400	84,000	102,000
		25-29	18	95,133	18,210	85,320	91,024	99,240
		30-34	24	97,656	15,945	83,760	93,813	110,816
	Biochemical prods	Total	48	74,239	20,192	63,671	70,000	80,500
	Coatings, inks, paints	Total	84	86,562	34,496	65,000	83,500	96,778
		15-19	15	72,817	15,796	61,000	70,000	77,000
		25-29	22	92,283	19,327	85,200	93,117	102,800
	Electronics/semiconductors	Total	98	92,706	23,890	74,000	86,618	105,500
		10-14	17	80,405	17,069	72,000	78,200	86,000
		15-19	21	82,402	13,639	72,000	78,000	93,400
		20-24	19	96,898	19,462	80,000	101,600	110,000
		30-34	17	107,335	29,674	84,000	101,000	130,000
	Food	Total	52	95,742	33,613	70,000	90,595	115,400
	Instruments	Total	75	81,962	21,973	68,000	79,400	92,019
		15-19	17	77,069	22,675	61,600	72,000	82,000
		20-24	16	79,422	13,689	70,000	82,794	89,500
	Medical devices	Total	128	87,584	30,344	67,420	82,650	96,800
		10-14	18	66,513	8,958	61,800	67,000	71,000
		15-19	34	75,024	13,370	64,580	75,000	85,000
		20-24	23	88,583	16,834	78,337	89,000	99,840
		25-29	20	107,356	37,169	79,750	93,000	137,500
		30-34	19	106,106	30,887	84,000	97,310	117,000
	Metals	Total	21	94,293	47,983	62,000	80,000	112,000
	Paper	Total	20	86,459	20,843	71,240	86,600	97,500

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.3 continued **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by INDUSTRY and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NONACADEMIC EMPLOYER	Personal Care	Total	25	85,473	20,475	74,100	80,000	98,000
	Petroleum	Total	95	97,338	24,766	77,412	95,800	110,000
		25-29	16	103,210	18,042	88,900	103,800	110,781
		30-34	25	111,453	24,459	99,800	106,000	125,000
	Pharmaceuticals	Total	710	94,332	30,608	75,000	87,666	106,542
		5-9	47	69,220	8,571	65,000	70,000	74,382
		10-14	132	77,919	15,135	70,004	78,000	81,800
		15-19	178	88,964	23,549	74,000	84,750	99,000
		20-24	134	98,512	26,810	82,300	93,450	106,000
		25-29	91	100,694	19,833	85,271	101,200	113,000
		30-34	67	120,867	44,527	96,500	110,000	132,500
		35-39	48	116,510	45,037	89,360	110,895	136,430
	Plastics	Total	130	90,633	25,329	75,000	86,385	101,000
		10-14	18	68,824	7,325	64,325	68,200	72,100
		15-19	29	85,620	17,766	75,000	83,020	90,000
		20-24	19	89,071	18,572	83,800	91,020	98,580
		25-29	22	99,492	17,590	85,000	98,080	110,000
		30-34	18	109,431	28,051	92,500	108,000	120,000
	Rubber	Total	25	86,368	26,424	70,000	77,000	90,600
	Soaps	Total	48	95,047	36,215	72,500	82,822	112,500
	Specialty chems	Total	299	89,627	31,106	70,500	85,000	100,000
		10-14	33	64,370	10,449	60,000	63,000	70,000
		15-19	74	78,826	13,723	69,700	76,160	86,500
		20-24	42	85,527	14,746	76,400	86,850	94,000
		25-29	43	103,754	28,120	90,000	99,000	115,000
		30-34	40	103,325	23,699	86,260	99,750	114,600
		35-39	37	105,292	44,620	80,000	97,620	110,000
		40 or more	16	115,841	62,861	85,660	98,700	107,538
	Textiles	Total	15	89,703	18,314	72,800	87,840	99,000
	Other manufacturing	Total	242	90,144	31,091	72,000	85,195	100,100
		10-14	36	68,553	10,387	63,000	68,175	76,500
		15-19	38	79,995	13,616	71,000	78,210	88,900
		20-24	38	90,040	24,444	76,600	85,220	94,500
		25-29	34	92,025	18,901	82,000	91,000	103,000
		30-34	46	112,652	48,693	87,380	98,650	123,000
		35-39	33	97,186	27,042	80,950	92,032	105,020

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.4 **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by GEOGRAPHIC REGION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
GEOGRAPHIC REGION	Pacific	Total	388	89,660	34,752	70,000	82,350	101,000
		5-9	15	67,220	8,464	62,700	66,000	70,000
		10-14	71	72,574	16,788	62,500	70,000	79,690
		15-19	95	79,444	22,357	69,000	75,000	89,000
		20-24	65	88,907	21,650	75,000	86,000	102,000
		25-29	62	100,076	29,566	82,700	99,750	112,000
		30-34	37	104,915	29,631	88,400	100,750	125,000
		35-39	34	121,308	65,291	84,000	100,400	128,565
	Mountain	Total	82	82,210	31,989	60,000	74,952	98,280
		15-19	16	77,705	20,123	64,500	72,987	93,500
	West North Central	Total	156	86,553	26,073	69,596	82,000	95,292
		10-14	16	71,529	6,959	65,943	71,745	76,750
		15-19	29	77,249	14,778	69,480	76,000	82,345
		20-24	32	81,801	20,638	69,250	79,650	90,974
		25-29	25	94,728	20,948	83,196	92,000	103,000
		30-34	25	104,858	35,355	82,700	95,000	140,000
		35-39	15	92,543	38,165	65,725	95,000	120,000
	West South Central	Total	187	85,798	25,447	70,000	82,644	98,100
		5-9	15	60,155	14,456	48,000	61,800	70,100
		10-14	25	67,632	13,453	60,000	68,244	75,600
		15-19	35	81,432	12,889	72,000	82,644	90,000
		20-24	27	82,955	18,632	75,100	83,000	93,000
		25-29	22	94,941	23,434	75,000	88,170	110,562
		30-34	31	97,193	29,653	78,000	94,500	120,000
		35-39	24	103,272	31,856	81,639	102,400	120,500
	East North Central	Total	466	89,397	28,786	72,500	85,004	100,000
		5-9	24	65,542	9,114	60,000	65,000	73,400
		10-14	73	73,204	18,323	63,000	72,700	80,122
		15-19	89	78,010	14,090	68,500	79,270	86,700
		20-24	88	90,475	16,788	80,500	92,710	100,000
		25-29	79	95,954	22,456	81,000	91,027	110,000
		30-34	68	105,791	27,981	88,680	101,250	120,410
		35-39	36	110,533	51,409	87,235	96,250	114,863
	East	Total	53	79,083	20,030	67,900	79,200	89,600

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.4 continued **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by GEOGRAPHIC REGION and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
GEOGRAPHIC REGION	Middle Atlantic	Total	670	92,381	31,007	73,960	87,000	104,000
		5-9	28	66,568	7,360	61,850	67,750	72,000
		10-14	95	70,688	12,431	63,756	72,000	78,000
		15-19	132	82,590	17,832	72,000	80,300	90,000
		20-24	116	94,003	24,061	80,000	89,086	103,572
		25-29	95	103,480	35,704	89,700	98,760	114,500
		30-34	107	105,080	31,163	84,000	100,800	117,000
		35-39	65	108,228	42,917	85,000	98,500	120,000
		40 or more	32	106,276	40,384	86,300	97,850	119,500
	South Atlantic	Total	375	89,315	29,148	71,484	84,840	99,282
		5-9	17	63,837	8,796	59,000	65,800	69,000
		10-14	48	67,739	12,827	59,970	68,370	75,030
		15-19	82	79,498	19,589	65,160	76,000	86,400
		20-24	67	91,685	24,914	77,400	86,100	98,580
		25-29	57	99,092	28,436	83,000	90,200	108,000
		30-34	63	113,256	38,658	88,600	105,600	126,900
		35-39	32	90,070	19,942	82,204	96,279	102,062
	New England	Total	263	96,700	36,677	73,000	90,000	110,000
		5-9	17	70,935	12,884	63,300	73,000	78,000
		10-14	50	77,621	13,999	70,000	77,929	83,000
		15-19	60	93,788	27,918	71,050	91,783	112,727
		20-24	39	96,640	34,252	78,000	90,344	101,000
		25-29	35	99,112	19,366	86,500	99,000	110,000
		30-34	28	129,437	67,447	84,000	118,750	146,260
		35-39	22	118,093	32,814	92,032	118,500	140,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.5 **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by TOTAL SUBORDINATES and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
TOTSUP	None	Total	15	90,299	36,455	67,000	78,839	125,000
	1-2	Total	746	80,194	20,824	68,000	77,456	90,246
		5-9	44	65,207	8,833	61,045	66,000	70,050
		10-14	149	70,064	12,754	63,000	70,000	77,600
		15-19	158	74,845	14,303	65,300	73,925	82,500
		20-24	117	78,737	15,121	72,000	80,000	89,600
		25-29	98	87,115	18,291	75,000	85,440	97,000
		30-34	93	96,457	26,106	82,150	95,000	107,000
		35-39	66	95,322	29,337	82,500	94,500	100,100
		40 or more	21	79,973	24,045	61,000	75,000	95,400
	3-9	Total	1747	90,681	29,012	72,163	86,400	103,000
		5-9	90	65,104	10,636	59,461	65,080	72,500
		10-14	244	72,763	16,104	63,900	71,365	80,000
		15-19	370	83,334	20,609	70,500	80,000	92,300
		20-24	313	92,761	22,707	79,500	89,324	102,000
		25-29	268	97,686	24,295	83,673	95,250	110,000
		30-34	245	106,514	34,973	86,220	100,000	120,000
		35-39	157	103,263	39,103	81,300	98,400	119,818
		40 or more	60	107,492	43,066	88,050	99,408	121,200
	10-14	Total	111	120,214	36,055	97,500	115,000	140,000
		15-19	18	98,744	22,854	84,920	93,500	110,000
		20-24	18	118,220	34,308	102,000	111,550	123,000
		25-29	24	124,145	24,383	107,414	122,500	139,000
		30-34	31	123,008	31,522	100,800	121,000	149,640
	15-29	Total	33	176,854	71,071	128,470	160,000	195,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 2.4.6 **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by EMPLOYER SIZE and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
EMPLOYER SIZE	Less than 50	Total	231	79,371	39,744	54,000	70,000	90,000
		10-14	45	66,325	16,971	51,000	69,000	77,857
		15-19	43	77,816	27,134	57,000	70,000	95,000
		20-24	36	77,747	33,431	54,800	73,963	86,000
		25-29	38	88,350	40,403	64,500	77,500	100,000
		30-34	26	91,544	52,958	60,000	78,545	96,623
		35-39	18	104,242	76,246	60,000	84,000	140,000
	50 to 99	Total	124	85,829	37,836	62,970	75,000	100,000
		10-14	24	67,100	18,877	54,000	70,000	77,750
		15-19	37	73,104	22,066	62,000	70,500	78,000
		30-34	16	100,289	37,214	80,644	98,278	121,500
	100 to 499	Total	316	84,467	31,620	65,000	78,000	93,500
		5-9	20	63,675	12,361	53,246	65,500	71,900
		10-14	67	68,632	13,167	60,000	68,000	77,000
		15-19	66	83,202	24,914	69,000	75,000	90,000
		20-24	45	82,743	27,778	68,000	80,000	90,000
		25-29	40	91,409	25,223	74,125	85,392	110,500
		30-34	25	97,500	29,876	86,025	92,500	101,005
		35-39	38	101,040	44,092	75,192	93,504	120,000
		40 or more	15	111,435	62,638	78,000	89,780	110,000
	500 to 2,499	Total	289	87,200	26,897	69,000	82,700	99,000
		5-9	15	65,851	9,804	59,461	62,284	72,000
		10-14	38	66,049	11,355	57,750	65,000	71,200
		15-19	71	76,825	17,587	68,000	73,795	84,000
		20-24	53	91,886	22,095	78,124	89,500	102,000
		25-29	40	102,019	30,801	84,251	98,400	118,000
		30-34	37	106,925	28,770	87,000	97,500	135,000
		35-39	25	97,467	30,749	79,638	93,821	117,000
	2,500 to 9,999	Total	447	92,869	33,726	72,000	86,000	104,000
		5-9	19	65,058	9,946	58,800	63,300	72,500
		10-14	64	74,896	15,016	64,900	71,259	78,250
		15-19	84	82,476	17,578	71,050	78,088	91,700
		20-24	77	91,404	22,936	76,400	86,100	98,500
		25-29	71	100,658	38,626	81,350	95,500	109,894
		30-34	82	110,914	44,701	83,200	104,250	128,000
		35-39	35	111,967	43,503	89,720	98,500	120,000
		40 or more	15	90,412	21,697	70,000	95,000	106,000

Note: Categories with fewer than 15 cases have been suppressed.

Table2.4.6 continued **SALARIES of PhD CHEMISTS employed FULL-TIME in INDUSTRY by EMPLOYER SIZE and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
EMPLOYER SIZE	10,000 to 24,999	Total	358	91,665	28,835	75,000	86,762	102,000
		5-9	17	67,986	6,475	65,000	69,000	72,870
		10-14	42	72,004	14,656	65,710	69,184	78,400
		15-19	84	82,454	15,495	73,000	81,246	90,000
		20-24	73	91,792	19,776	79,900	89,111	100,000
		25-29	48	91,958	12,848	84,000	90,625	99,228
		30-34	49	109,317	29,549	87,500	104,000	123,264
		35-39	35	114,184	47,513	83,000	105,000	120,000
	25,000 or more	Total	872	94,061	26,128	77,000	89,600	104,176
		5-9	41	68,907	6,758	65,000	69,592	73,000
		10-14	117	76,778	14,184	70,000	76,400	81,500
		15-19	163	84,256	17,628	72,020	82,300	91,200
		20-24	157	92,298	17,509	81,363	90,200	100,100
		25-29	148	101,453	21,331	85,660	98,760	112,000
		30-34	146	110,547	32,009	90,000	105,500	123,000
		35-39	76	104,898	33,392	90,540	100,000	114,033
		40 or more	24	119,238	31,782	94,500	114,500	131,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 3.1.1 **SALARIES of GOVERNMENTAL CHEMISTS employed FULL-TIME by DEGREE and YEARS SINCE BS 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
HIGHEST DEGREE	BS	Total	141	55,623	18,746	39,828	53,000	66,442
		15-19	16	54,925	18,345	43,544	51,200	62,766
		20-24	25	55,213	16,457	45,136	51,110	68,340
		25-29	32	58,622	18,055	46,270	58,426	70,740
		30-34	17	69,217	22,496	58,000	66,439	86,856
	MS	Total	117	62,171	19,517	48,000	60,500	72,200
		20-24	23	58,633	11,649	48,315	60,300	65,000
		25-29	25	65,454	14,049	51,319	66,400	74,035
		30-34	26	69,008	20,556	50,238	62,359	84,229
	PhD	Total	340	78,014	21,094	62,823	75,427	92,556
		10-14	35	59,827	12,779	53,562	60,940	68,340
		15-19	42	69,749	14,364	61,000	68,000	80,200
		20-24	39	72,430	18,096	58,000	71,000	84,400
		25-29	56	77,380	22,330	62,437	75,000	92,188
		30-34	68	89,093	17,721	76,871	87,522	103,054
		35-39	52	81,701	21,233	65,513	83,763	99,017
		40 or more	40	90,839	18,852	75,925	92,740	104,131

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.1.1 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by CONTRACT STATUS and RANK 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
9-10 month	Full professor	512	75,534	29,735	58,050	70,000	85,277
	Assoc professor	219	50,740	11,290	43,417	48,580	55,300
	Asst professor	248	43,922	9,493	37,959	42,000	47,922
	Instructor, adjunct	48	38,011	8,914	33,800	36,000	40,000
	No ranks	18	47,632	10,733	38,352	48,019	54,857
11-12 month	Full professor	210	101,600	33,260	81,000	95,500	119,000
	Assoc professor	59	65,758	18,904	55,694	63,000	75,950
	Asst professor	68	56,722	16,954	45,000	56,500	64,075
	Instructor, adjunct	17	57,596	27,297	31,174	61,000	80,000
	Research appt	101	55,418	23,221	38,000	51,110	71,300
	Other nonfaculty	38	60,764	24,868	43,000	53,250	79,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.2.1 SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and YEARS SINCE PhD - 9 or 10 Month Contract 1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Full professor	Total	508	75,628	29,775	58,218	70,000	85,277
	10-14	26	71,553	23,089	52,327	66,122	74,945
	15-19	63	68,130	18,902	52,000	67,600	80,000
	20-24	73	73,619	21,752	56,000	68,000	90,752
	25-29	105	72,519	28,464	56,304	68,000	79,000
	30-34	133	77,920	40,163	60,000	69,705	85,050
	35-39	86	82,334	26,726	64,500	77,925	97,300
	40+	19	87,094	21,885	68,500	83,500	109,000
Assoc professor	Total	217	50,786	11,297	43,500	48,580	55,300
	5-9	29	47,125	9,647	40,500	45,400	50,000
	10-14	67	52,032	14,886	43,000	48,000	56,000
	15-19	53	52,084	8,232	46,370	52,000	59,800
	20-24	25	51,463	9,010	45,000	52,000	55,900
	25-29	23	46,345	7,816	42,000	45,735	50,000
Asst professor	Total	248	43,922	9,493	37,959	42,000	47,922
	2-4	68	41,070	6,439	36,904	40,000	45,000
	5-9	129	45,023	8,563	40,000	43,743	48,500
	10-14	27	44,414	5,952	41,000	42,084	50,000
Instructor, adjunct	Total	48	38,011	8,914	33,800	36,000	40,000
	2-4	15	37,362	7,276	33,600	35,004	38,000
No ranks	Total	18	47,632	10,733	38,352	48,019	54,857

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.2.2 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and YEARS SINCE PhD - 11 or 12 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Full professor	Total	209	101,727	33,288	81,000	96,000	119,000
	20-24	21	97,889	33,178	75,379	93,822	106,000
	25-29	46	94,900	26,672	80,000	92,500	110,000
	30-34	62	108,375	34,561	82,000	100,877	122,500
	35-39	39	107,912	36,005	84,275	96,000	126,002
	40+	18	111,496	30,590	90,056	107,500	127,600
Assoc professor	Total	58	66,202	18,756	56,380	63,000	75,950
	10-14	18	66,183	22,662	58,000	63,000	75,950
Asst professor	Total	68	56,722	16,954	45,000	56,500	64,075
	2-4	15	48,568	11,388	36,000	45,000	61,000
	5-9	27	57,769	13,722	49,500	57,000	63,150
Instructor, adjunct	Total	16	59,208	27,344	31,087	61,000	80,000
Research appt	Total	100	55,157	23,189	37,948	51,055	70,650
	2-4	19	46,382	18,799	26,000	45,000	65,000
	5-9	17	43,297	15,004	31,400	41,600	58,600
	10-14	19	44,142	12,627	36,124	42,384	48,100
	15-19	17	70,382	33,263	48,494	69,000	90,000
Other nonfaculty	Total	38	60,764	24,868	43,000	53,250	79,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.3.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and ACADEMIC WORK FUNCTION - 9 or 10 Month Contract 1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Teaching	Full professor	356	69,788	28,026	55,000	65,498	78,364
	Assoc professor	171	48,848	8,918	42,800	46,889	53,910
	Asst professor	199	42,765	9,514	37,200	41,000	45,500
	Instructor, adjunct	46	38,006	8,948	34,000	36,000	40,000
	No ranks	17	47,569	11,060	38,352	47,937	54,857
Research	Full professor	107	91,647	26,664	71,376	86,000	108,685
	Assoc professor	29	60,128	18,494	50,083	54,000	61,500
	Asst professor	43	48,422	7,950	43,000	47,200	50,500
Administration	Full professor	20	87,054	43,582	60,574	77,000	97,500

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.3.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and ACADEMIC WORK FUNCTION - 11 or 12 Month Contract 1999 ACS Salary Survey

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Teaching	Full professor	63	82,804	27,257	68,100	81,655	96,000
	Assoc professor	26	55,101	11,981	48,000	57,913	63,000
	Asst professor	20	49,018	11,852	38,809	47,000	58,729
Research	Full professor	62	116,695	35,882	90,056	110,000	130,000
	Assoc professor	23	76,233	18,837	59,331	68,848	91,000
	Asst professor	43	59,331	15,417	52,000	60,000	69,500
	Research appt	93	55,467	23,752	38,000	51,000	71,903
Administration	Full professor	52	106,006	24,874	86,800	100,320	122,600

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.4.1 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and SPECIALTY - 9 or 10 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Analytical chemistry	Full professor	40	75,921	20,696	59,744	70,368	92,179
	Assoc professor	19	49,206	8,420	44,500	48,700	54,200
	Asst professor	20	41,863	6,384	36,375	41,281	45,000
Biochemistry	Full professor	47	76,568	22,778	62,000	70,000	95,000
	Assoc professor	24	48,475	7,510	43,416	46,865	52,636
	Asst professor	29	42,064	7,010	37,000	40,200	45,651
Chemical education	Full professor	135	65,481	35,806	52,800	61,690	70,200
	Assoc professor	60	47,316	9,314	41,401	45,000	52,000
	Asst professor	41	39,851	7,027	36,000	38,700	41,652
	Instructor, adjunct	21	38,390	6,707	35,000	38,513	41,000
	No ranks	16	47,760	11,014	38,212	48,019	56,800
Environmental chemistry	Full professor	17	74,775	18,536	64,000	70,500	87,500
Inorganic chemistry	Full professor	45	78,648	18,284	61,322	80,000	91,500
	Assoc professor	20	52,500	6,743	47,886	52,833	57,500
	Asst professor	23	45,523	6,249	40,500	44,716	49,343
Organic chemistry	Full professor	88	76,076	32,704	57,492	68,449	85,252
	Assoc professor	31	50,193	8,959	43,000	49,522	55,300
	Asst professor	44	42,688	4,705	39,370	42,920	46,250
Physical chemistry	Full professor	67	82,315	29,766	60,235	76,471	95,000
	Assoc professor	31	55,158	18,818	45,895	52,000	59,800
	Asst professor	43	43,833	8,081	38,000	43,000	46,194
Polymer chemistry	Full professor	20	92,836	20,581	80,500	96,000	108,500

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.4.2 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and SPECIALTY - 11 or 12 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Analytical chemistry	Full professor	19	102,011	39,232	75,379	93,000	132,300
Biochemistry	Full professor	53	112,788	37,300	87,000	106,000	125,000
	Assoc professor	17	67,155	12,702	58,000	63,000	69,750
	Asst professor	23	57,810	12,193	52,000	60,000	65,000
Chemical education	Full professor	21	85,515	26,703	71,642	81,655	87,000
Medicinal-Pharmaceutical	Full professor	17	98,968	27,679	81,300	96,239	105,000
Physical chemistry	Full professor	19	103,102	38,052	69,192	93,357	135,200
	Research appt	15	57,437	22,325	43,439	53,700	63,243

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.5.1 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and TENURE - 9 or 10 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Yes	Full professor	503	75,601	29,711	58,100	70,000	85,503
	Assoc professor	193	51,275	11,252	44,000	49,000	55,300
No, in tenure track	Assoc professor	19	48,367	10,710	41,500	44,800	53,900
	Asst professor	218	44,185	9,786	38,000	42,681	48,000
No, no	Instructor, adjunct	32	35,480	6,928	32,250	34,750	38,630

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.5.2 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and TENURE - 11 or 12 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Yes	Full professor	197	102,629	32,788	81,113	96,000	119,500
	Assoc professor	36	66,014	18,826	56,440	63,000	69,875
No, in	Asst professor	47	58,490	15,950	48,000	59,000	63,150
No, no tenure track	Asst professor	17	51,530	17,110	40,850	46,700	72,200
	Research appt	61	53,605	21,102	40,000	49,000	63,243
Not applicable	Research appt	37	58,025	26,587	38,000	62,000	73,000
	Other nonfaculty	24	53,956	17,093	43,000	50,834	65,458

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.6.1 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and INSTITUTIONAL CONTROL - 9 or 10 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public	Full professor	330	76,424	24,084	61,322	70,536	85,000
	Assoc professor	135	51,938	12,159	44,800	49,050	56,000
	Asst professor	158	44,492	8,130	39,339	43,700	48,500
	Instructor, adjunct	35	37,432	7,176	33,600	35,400	40,000
	No ranks	16	48,282	10,291	38,680	48,019	56,800
Private	Full professor	182	73,922	37,919	54,000	64,000	86,200
	Assoc professor	84	48,814	9,488	42,250	47,000	54,055
	Asst professor	89	42,785	11,477	37,000	40,042	45,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.6.2 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and INSTITUTIONAL CONTROL - 11 or 12 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public	Full professor	153	99,770	27,310	81,113	96,000	115,000
	Assoc professor	45	65,240	18,586	56,380	62,384	75,950
	Asst professor	40	58,789	19,220	45,000	58,374	69,500
	Research appt	73	54,118	23,786	36,124	50,000	70,000
	Other nonfaculty	32	58,382	23,100	43,000	52,250	73,570
Private	Full professor	57	106,512	45,501	75,000	93,000	139,000
	Asst professor	27	53,786	13,062	43,000	54,075	62,100
	Research appt	28	58,808	21,722	41,500	57,800	74,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.7.1 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and TYPE OF INSTITUTION - 9 or 10 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NonPhD-granting	Full professor	254	62,517	27,654	52,000	60,000	69,781
	Assoc professor	128	46,265	7,483	42,000	45,000	49,711
	Asst professor	147	40,456	5,686	36,400	40,000	43,520
	Instructor, adjunct	23	39,526	10,373	35,000	38,000	46,000
	No ranks	18	47,632	10,733	38,352	48,019	54,857
PhD-granting	Full professor	247	88,426	26,247	70,000	82,900	102,000
	Assoc professor	88	57,030	12,871	49,659	54,000	61,869
	Asst professor	93	49,341	11,818	43,100	47,577	50,800
	Instructor, adjunct	23	36,823	7,548	33,000	35,000	40,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.7.2 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and TYPE OF INSTITUTION - 11 or 12 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
NonPhD-granting	Full professor	58	79,871	22,182	68,100	79,236	89,100
PhD-granting	Full professor	90	108,210	30,451	84,600	106,494	126,700
	Assoc professor	23	72,627	20,310	59,445	68,870	86,000
	Asst professor	25	56,027	16,721	48,000	54,500	63,150
	Research appt	74	55,705	21,710	39,902	53,350	72,000
	Other nonfaculty	30	55,113	19,979	43,000	50,834	65,000
Medical school	Full professor	62	112,333	36,700	90,000	102,263	125,000
	Assoc professor	24	68,310	13,613	58,666	63,500	72,924
	Asst professor	31	63,892	15,405	57,000	62,000	69,500
	Research appt	23	54,692	29,384	36,000	46,700	62,441

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.8.1

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK, INST CONTROL and TYPE OF INSTITUTION - 9 or 10 Month Contract 1999 ACS Salary Survey

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public	NonPhD-granting	Full professor	147	63,130	13,052	54,000	62,500	71,000
		Assoc professor	67	46,484	7,174	42,160	45,400	49,000
		Asst professor	77	40,716	5,838	37,000	40,000	43,700
		No ranks	16	48,282	10,291	38,680	48,019	56,800
	PhD-granting	Full professor	174	86,833	26,009	68,900	81,000	100,000
		Assoc professor	65	57,320	13,897	49,050	54,000	62,000
		Asst professor	74	48,435	8,565	43,700	47,389	50,500
		Instructor, adjunct	20	36,846	8,009	33,300	35,000	40,000
Private	NonPhD-granting	Full professor	107	61,676	39,867	50,000	56,304	63,250
		Assoc professor	61	46,024	7,861	40,802	45,000	49,900
		Asst professor	69	39,954	5,279	35,890	39,400	42,084
	PhD-granting	Full professor	73	92,222	26,603	77,150	91,500	105,000
		Assoc professor	23	56,212	9,609	51,000	56,400	61,000
		Asst professor	19	52,871	19,995	40,500	48,000	57,200

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.8.2

SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK, INST CONTROL, and TYPE OF INSTITUTION - 11 or 12 Month Contract 1999 ACS Salary Survey

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Public	NonPhD-granting	Full professor	32	80,886	13,820	71,065	80,736	87,300
	PhD-granting	Full professor	77	104,912	28,081	84,600	105,000	122,700
		Assoc professor	20	71,305	19,791	58,723	65,935	83,751
		Asst professor	17	55,668	18,629	46,500	54,500	63,150
		Research appt	56	53,653	21,230	34,562	50,805	71,952
		Other nonfaculty	25	53,543	19,715	43,000	49,667	62,500
	Medical school	Full professor	44	104,506	27,738	89,500	100,000	110,000
		Assoc professor	17	67,908	12,573	59,600	63,000	68,848
		Asst professor	18	66,937	18,264	58,600	61,134	72,000
Private	NonPhD-granting	Full professor	26	78,621	29,699	60,000	75,825	93,000
	PhD-granting	Research appt	18	62,089	22,557	48,100	57,800	75,000
	Medical school	Full professor	18	131,464	48,383	92,350	128,000	171,500

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.9.1 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and SEX - 9 or 10 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Men	Full professor	454	76,989	29,379	60,000	71,000	87,357
	Assoc professor	163	51,546	11,782	43,500	49,050	56,400
	Asst professor	161	44,283	9,683	38,965	42,500	47,843
	Instructor, adjunct	29	40,137	9,989	35,000	38,000	46,000
Women	Full professor	55	64,056	30,780	50,000	59,000	67,243
	Assoc professor	52	48,715	9,639	43,659	46,945	53,273
	Asst professor	85	43,145	9,215	37,100	41,012	47,577
	Instructor, adjunct	19	34,766	5,819	32,000	34,500	39,250

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.9.2 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and SEX - 11 or 12 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Men	Full professor	190	102,662	33,547	81,000	96,000	120,000
	Assoc professor	51	68,424	18,239	58,000	63,000	80,000
	Asst professor	49	57,817	17,564	45,000	57,000	63,000
	Research appt	79	57,506	24,307	40,000	56,382	72,000
	Other nonfaculty	29	60,670	26,995	43,000	52,000	82,000
Women	Full professor	17	85,099	21,057	71,642	81,655	100,000
	Asst professor	19	53,898	15,349	46,000	52,666	69,500
	Research appt	21	47,413	17,517	33,000	42,384	62,500

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.10.1 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and GEOGRAPHIC REGION - 9 or 10 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific	Full professor	70	78,640	25,663	60,000	70,788	96,000
	Assoc professor	15	51,285	12,384	42,500	48,000	61,000
	Asst professor	21	46,329	10,004	42,000	44,000	50,800
Mountain	Full professor	35	74,728	29,315	51,301	71,245	88,000
	Assoc professor	15	52,439	9,804	42,000	54,000	62,000
	Asst professor	16	45,258	10,046	38,787	41,950	48,422
West North Central	Full professor	41	70,509	25,245	52,000	64,000	90,752
	Assoc professor	22	48,244	7,770	42,160	46,830	51,700
	Asst professor	33	43,429	11,288	37,200	41,000	48,000
West South Central	Full professor	43	69,883	21,998	53,500	62,694	81,000
	Assoc professor	18	47,325	8,992	40,590	46,400	51,000
	Asst professor	19	42,572	5,715	38,457	42,000	47,000
East North Central	Full professor	88	72,445	20,338	58,425	67,750	79,364
	Assoc professor	44	52,346	16,614	43,935	49,261	53,955
	Asst professor	58	43,291	6,558	39,152	42,261	47,577
East	Full professor	29	59,734	8,943	51,708	60,000	65,014
Middle Atlantic	Full professor	89	81,420	47,453	59,300	75,478	86,915
	Assoc professor	34	51,432	9,633	43,417	52,120	58,000
	Asst professor	34	44,864	14,937	38,400	41,256	46,500
South Atlantic	Full professor	71	79,625	30,276	61,550	76,000	91,604
	Assoc professor	36	49,403	9,300	44,457	46,365	53,800
	Asst professor	36	44,479	8,426	40,021	44,858	48,000
New England	Full professor	43	81,029	17,356	67,642	80,000	92,000
	Assoc professor	21	56,079	8,275	50,000	56,400	60,800
	Asst professor	15	45,701	7,439	40,000	45,000	51,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 4.10.2 **SALARIES of PhD ACADEMIC CHEMISTS employed FULL-TIME by RANK and GEOGRAPHIC REGION - 11 or 12 Month Contract 1999 ACS Salary Survey**

		Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
Pacific	Full professor	19	111,038	39,840	81,000	102,000	145,000
	Asst professor	16	63,711	13,930	53,158	62,550	73,100
West North Central	Full professor	25	100,237	27,410	80,488	95,000	109,000
West South Central	Full professor	17	87,840	34,264	71,642	87,000	93,357
East North Central	Full professor	49	107,655	31,895	86,650	100,000	123,000
	Research appt	15	55,128	21,994	36,124	57,390	69,000
East South Central	Full professor	16	91,721	42,863	68,518	89,000	104,339
Middle Atlantic	Full professor	33	98,782	37,512	77,000	85,400	113,341
South Atlantic	Full professor	34	100,127	25,551	84,275	96,150	120,000
	Research appt	19	49,440	22,859	33,000	40,000	70,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 5.1.1 **STIPENDS of ACADEMIC POSTDOCTORAL FELLOWS by INSTITUTIONAL CONTROL and WORK SPECIALTY 1999 ACS Salary Survey**

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
SPEC	Chemistry	Total	135	27,784	5,183	24,000	26,900	30,000
		Public	78	27,496	5,165	24,000	26,250	31,000
		Private	57	28,179	5,227	24,500	27,000	30,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 6.1.1 SALARIES of CHEMICAL ENGINEERS employed FULL-TIME in INDUSTRY by DEGREE and YEARS SINCE BS 1999 ACS Salary Survey

			Count	Mean	Std Dev	25th %-ile	50th %-ile	75th %-ile
HIGHEST DEGREE	BS	Total	82	71,700	24,380	54,600	70,250	83,351
		20-24	19	86,410	18,780	70,500	85,500	96,000
	MS	Total	83	72,211	21,084	57,840	67,200	88,152
		20-24	17	78,264	19,445	63,706	76,500	94,200
		25-29	20	84,077	20,959	65,920	82,000	98,600
	PhD	Total	133	91,060	26,479	74,700	88,000	103,000
		10-14	20	73,131	9,260	66,500	75,090	79,500
		15-19	22	83,160	12,775	72,349	82,000	92,640
		20-24	20	89,808	18,597	79,000	87,750	104,500
		25-29	18	100,046	21,913	87,366	98,450	108,000
		30-34	22	98,621	31,472	89,650	97,317	105,000
		35-39	18	104,789	42,652	84,520	98,213	107,000

Note: Categories with fewer than 15 cases have been suppressed.

Table 7.1.1

EMPLOYMENT STATUS OF ALL RESPONDENTS
by WORK SPECIALTY
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	Fully retired	Total
SPEC	Chemical engineering		407	13	5	17	4	18	464
		Row Percent	87.7%	2.8%	1.1%	3.7%	.9%	3.9%	100.0%
		Column Percent	4.3%	4.6%	2.5%	7.1%	3.0%	6.4%	4.4%
	Ag/Food chemistry		285	10	0	9	3	12	319
		Row Percent	89.3%	3.1%	.0%	2.8%	.9%	3.8%	100.0%
		Column Percent	3.0%	3.6%	.0%	3.8%	2.3%	4.3%	3.0%
	Analytical chemistry		1593	23	20	46	14	37	1733
		Row Percent	91.9%	1.3%	1.2%	2.7%	.8%	2.1%	100.0%
		Column Percent	16.8%	8.2%	9.8%	19.2%	10.5%	13.2%	16.3%
	Biochemistry		422	15	31	6	6	8	488
		Row Percent	86.5%	3.1%	6.4%	1.2%	1.2%	1.6%	100.0%
		Column Percent	4.5%	5.4%	15.2%	2.5%	4.5%	2.8%	4.6%
	Biotechnology		252	8	7	10	4	2	283
		Row Percent	89.0%	2.8%	2.5%	3.5%	1.4%	.7%	100.0%
		Column Percent	2.7%	2.9%	3.4%	4.2%	3.0%	.7%	2.7%
	Chemical education		570	40	1	3	10	17	641
		Row Percent	88.9%	6.2%	.2%	.5%	1.6%	2 7%	100.0%
		Column Percent	6.0%	14.3%	.5%	1.3%	7.5%	6.0%	6.0%
	Clinical chemistry		84	6	1	2	4	4	101
		Row Percent	83.2%	5.9%	1.0%	2.0%	4.0%	4.0%	100.0%
		Column Percent	.9%	2.1%	.5%	.8%	3.0%	1.4%	1.0%
	Environmental chemistry		634	24	6	21	20	23	728
		Row Percent	87.1%	3.3%	.8%	2.9%	2.7%	3.2%	100.0%
		Column Percent	6.7%	8.6%	2.9%	8.8%	15.0%	8.2%	6.9%
	General chemistry		273	12	0	4	2	9	300
		Row Percent	91.0%	4.0%	.0%	1.3%	.7%	3.0%	100.0%
		Column Percent	2.9%	4.3%	.0%	1.7%	1.5%	3.2%	2.8%
	Inorganic chemistry		321	8	13	9	4	6	361
		Row Percent	88.9%	2.2%	3.6%	2.5%	1.1%	1.7%	100.0%
		Column Percent	3.4%	2.9%	6.4%	3.8%	3.0%	2.1%	3.4%
	Materials science		376	7	13	12	3	9	420
		Row Percent	89.5%	1.7%	3.1%	2.9%	.7%	2.1%	100.0%
		Column Percent	4.0%	2.5%	6.4%	5.0%	2.3%	3.2%	4.0%
	Medicinal-Pharmaceutical		802	12	15	14	9	14	866
		Row Percent	92.6%	1.4%	1.7%	1.6%	1.0%	1.6%	100.0%
		Column Percent	8.5%	4.3%	7.4%	5.9%	6.8%	5.0%	8.2%

Table 7.1.1 continued

EMPLOYMENT STATUS OF ALL RESPONDENTS
by WORK SPECIALTY
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	Fully retired	Total
SPEC	Organic chemistry		986	16	53	24	10	35	1124
		Row Percent	87.7%	1.4%	4.7%	2.1%	.9%	3.1%	100.0%
		Column Percent	10.4%	5.7%	26.0%	10.0%	7.5%	12.5%	10.6%
	Physical chemistry		400	14	28	14	4	13	473
		Row Percent	84.6%	3.0%	5.9%	3.0%	.8%	2.7%	100.0%
		Column Percent	4.2%	5.0%	13.7%	5.9%	3.0%	4.6%	4.5%
	Polymer chemistry		807	20	7	17	16	26	893
		Row Percent	90.4%	2.2%	.8%	1.9%	1.8%	2.9%	100.0%
		Column Percent	8.5%	7.1%	3.4%	7.1%	12.0%	9.3%	8.4%
	Other chemical science		240	12	3	7	3	9	274
		Row Percent	87.6%	4.4%	1.1%	2.6%	1.1%	3.3%	100.0%
		Column Percent	2.5%	4.3%	1.5%	2.9%	2.3%	3.2%	2.6%
	Business Administration		243	4	0	4	4	14	269
		Row Percent	90.3%	1.5%	.0%	1.5%	1.5%	5.2%	100.0%
		Column Percent	2.6%	1.4%	.0%	1.7%	3.0%	5.0%	2.5%
	Computer science		108	6	0	3	1	1	119
		Row Percent	90.8%	5.0%	.0%	2.5%	.8%	.8%	100.0%
		Column Percent	1.1%	2.1%	.0%	1.3%	.8%	.4%	1.1%
	Law		78	3	0	1	1	1	84
		Row Percent	92.9%	3.6%	.0%	1.2%	1.2%	1.2%	100.0%
		Column Percent	.8%	1.1%	.0%	.4%	.8%	.4%	.8%
	Other nonchemistry		555	25	1	16	10	22	629
		Row Percent	88.2%	4.0%	.2%	2.5%	1.6%	3.5%	100.0%
		Column Percent	5.9%	8.9%	.5%	6.7%	7.5%	7.8%	5.9%
	No answer		32	2	0	0	1	1	36
		Row Percent	88.9%	5.6%	.0%	.0%	2.8%	2.8%	100.0%
		Column Percent	.3%	.7%	.0%	.0%	.8%	.4%	.3%
Total			9468	280	204	239	133	281	10605
	Row Percent		89.3%	2.6%	1.9%	2.3%	1.3%	2.6%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 7.1.2

EMPLOYMENT STATUS OF ALL RESPONDENTS
by EMPLOYER TYPE
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full-time	Part-time	Postdoc	Seeking empl	Not seeking empl	Fully retired	Total
EMPLOYER TYPE	Industry		6014	75	8	171	2	0	6270
		Row Percent	95.9%	1.2%	.1%	2.7%	.0%	.0%	100.0%
		Column Percent	63.5%	26.8%	3.9%	71.5%	1.5%	.0%	59.1%
	Government		680	17	15	13	0	0	725
		Row Percent	93.8%	2.3%	2.1%	1.8%	.0%	.0%	100.0%
		Column Percent	7.2%	6.1%	7.4%	5.4%	.0%	.0%	6.8%
	Other Nonacademic		360	61	4	8	1	0	434
		Row Percent	82.9%	14.1%	.9%	1.8%	.2%	.0%	100.0%
		Column Percent	3.8%	21.8%	2.0%	3.3%	.8%	.0%	4.1%
	High School		147	5	0	1	0	0	153
		Row Percent	96.1%	3.3%	.0%	.7%	.0%	.0%	100.0%
		Column Percent	1.6%	1.8%	.0%	.4%	.0%	.0%	1.4%
	College or University		2010	100	161	31	1	0	2303
		Row Percent	87.3%	4.3%	7.0%	1.3%	.0%	.0%	100.0%
		Column Percent	21.2%	35.7%	78.9%	13.0%	.8%	0%	21.7%
	No answer		257	22	16	15	129	281	720
		Row Percent	35.7%	3.1%	2.2%	2.1%	17.9%	39.0%	100.0%
		Column Percent	2.7%	7.9%	7.8%	6.3%	97.0%	100.0%	6.8%
Total			9468	280	204	239	133	281	10605
	Row Percent		89.3%	2.6%	1.9%	2.3%	1.3%	2.6%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.1.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by HIGHEST DEGREE
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part-time	Postdoc	Seeking empl	Not seeking empl	Fully ret	Total
HIGHEST DEGREE	BS		1998	49	6	54	40	64	2211
		Row Percent	90.4%	2.2%	.3%	2.4%	1.8%	2.9%	100.0%
		Column Percent	22.9%	19.6%	3.0%	25.2%	31.5%	25.9%	22.7%
	MS		1447	47	3	36	27	48	1608
		Row Percent	90.0%	2.9%	.2%	2.2%	1.7%	3.0%	100.0%
		Column Percent	16.6%	18.8%	1.5%	16.8%	21.3%	19.4%	16.5%
	PhD		5198	154	189	123	58	129	5851
		Row Percent	88.8%	2.6%	3.2%	2.1%	1.0%	2.2%	100.0%
		Column Percent	59.6%	61.6%	95.0%	57.5%	45.7%	52.2%	59.9%
	Other		80	0	1	1	2	6	90
		Row Percent	88.9%	.0%	1.1%	1.1%	2.2%	6.7%	100.0%
		Column Percent	.9%	.0%	.5%	.5%	1.6%	2.4%	.9%
Total			8723	250	199	214	127	247	9760
	Row Percent		89.4%	2.6%	2.0%	2.2%	1.3%	2.5%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.1.2

EMPLOYMENT STATUS OF MEN CHEMISTS
by HIGHEST DEGREE
1999 Survey of ACS Members

			EMPLOYMENT STATUS					
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	Total
HIGHEST DEGREE	BS		1344	24	3	37	16	1424
		Row Percent	94.4%	1.7%	.2%	2.6%	1.1%	100.0%
		Column Percent	19.9%	17.0%	2.1%	23.7%	30.2%	19.7%
	MS		1026	25	3	21	6	1081
		Row Percent	94.9%	2.3%	.3%	1.9%	.6%	100.0%
		Column Percent	15.2%	17.7%	2.1%	13.5%	11.3%	14.9%
	PhD		4319	92	137	97	29	4674
		Row Percent	92.4%	2.0%	2.9%	2.1%	.6%	100.0%
		Column Percent	64.0%	65.2%	95.1%	62.2%	54.7%	64.5%
	Other		58	0	1	1	2	62
		Row Percent	93.5%	.0%	1.6%	1.6%	3.2%	100.0%
		Column Percent	.9%	.0%	.7%	.6%	3.8%	.9%
Total			6747	141	144	156	53	7241
	Row Percent		93.2%	1.9%	2.0%	2.2%	.7%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.1.3

EMPLOYMENT STATUS OF WOMEN CHEMISTS
by HIGHEST DEGREE
1999 Survey of ACS Members

			EMPLOYMENT STATUS					
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	Total
HIGHEST DEGREE	BS		637	25	3	16	24	705
		Row Percent	90.4%	3.5%	.4%	2.3%	3.4%	100.0%
		Column Percent	33.5%	23.6%	5.9%	29.6%	32.4%	32.3%
	MS		410	22	0	15	21	468
		Row Percent	87.6%	4.7%	.0%	3.2%	4.5%	100.0%
		Column Percent	21.6%	20.8%	.0%	27.8%	28.4%	21.4%
	PhD		832	59	48	23	29	991
		Row Percent	84.0%	6.0%	4.8%	2.3%	2.9%	100.0%
		Column Percent	43.8%	55.7%	94.1%	42.6%	39.2%	45.3%
	Other		22	0	0	0	0	22
		Row Percent	100.0%	.0%	.0%	.0%	.0%	100.0%
		Column Percent	1.2%	.0%	.0%	.0%	.0%	1.0%
Total			1901	106	51	54	74	2186
	Row Percent		87.0%	4.8%	2.3%	2.5%	3.4%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.2.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by AGE
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
AGE	20-24		135	3	2	5	4	0	149
		Row Percent	90.6%	2.0%	1.3%	3.4%	2.7%	.0%	100.0%
		Column Percent	1.5%	1.2%	1.0%	2.3%	3.1%	.0%	1.5%
	25-29		508	10	45	6	6	0	575
		Row Percent	88.3%	1.7%	7.8%	1.0%	1.0%	.0%	100.0%
		Column Percent	5.8%	4.0%	22.6%	2.8%	4.7%	.0%	5.9%
	30-34		972	21	74	16	7	0	1090
		Row Percent	89.2%	1.9%	6.8%	1.5%	.6%	.0%	100.0%
		Column Percent	11.1%	8.4%	37.2%	7.5%	5.5%	.0%	11.2%
	35-39		1322	38	59	35	27	0	1481
		Row Percent	89.3%	2.6%	4.0%	2.4%	1.8%	.0%	100.0%
		Column Percent	15.2%	15.2%	29.6%	16.4%	21.3%	.0%	15.2%
	40-44		1376	28	13	31	15	0	1463
		Row Percent	94.1%	1.9%	.9%	2.1%	1.0%	.0%	100.0%
		Column Percent	15.8%	11.2%	6.5%	14.5%	11.8%	.0%	15.0%
	45-49		1275	28	4	23	8	0	1338
		Row Percent	95.3%	2.1%	.3%	1.7%	.6%	.0%	100.0%
		Column Percent	14.6%	11.2%	2.0%	10.7%	6.3%	.0%	13.7%
	50-54		1213	24	1	34	19	0	1291
		Row Percent	94.0%	1.9%	.1%	2.6%	1.5%	.0%	100.0%
		Column Percent	13.9%	9.6%	.5%	15.9%	15.0%	.0%	13.2%
	55-59		1149	25	0	36	13	0	1223
		Row Percent	93.9%	2.0%	.0%	2.9%	1.1%	.0%	100.0%
		Column Percent	13.2%	10.0%	.0%	16.8%	10.2%	.0%	12.5%
	60-64		585	50	1	21	22	0	679
		Row Percent	86.2%	7.4%	.1%	3.1%	3.2%	.0%	100.0%
		Column Percent	6.7%	20.0%	.5%	9.8%	17.3%	.0%	7.0%
	65-69		186	21	0	7	6	0	220
		Row Percent	84.5%	9.5%	.0%	3.2%	2.7%	.0%	100.0%
		Column Percent	2.1%	8.4%	.0%	3.3%	4.7%	.0%	2.3%
	70 or more		2	2	0	0	0	0	4
		Row Percent	50.0%	50.0%	.0%	.0%	.0%	.0%	100.0%
		Column Percent	.0%	.8%	.0%	.0%	.0%	.0%	.0%
	No answer		0	0	0	0	0	247	247
		Row Percent	.0%	.0%	.0%	.0%	.0%	100.0%	100.0%
		Column Percent	.0%	.0%	.0%	.0%	.0%	100.0%	2.5%
Total			8723	250	199	214	127	247	9760
	Row Percent		89.4%	2.6%	2.0%	2.2%	1.3%	2.5%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.3.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by RACE/ETHNICITY
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
RACE/ ETHNICITY	Hispanic		180	4	6	5	5	0	200
		Row Percent	90.0%	2.0%	3.0%	2.5%	2.5%	.0%	100.0%
		Column Percent	2.1%	1.6%	3.0%	2.3%	3.9%	.0%	2.0%
	American Indian		22	0	1	1	0	0	24
		Row Percent	91.7%	.0%	4.2%	4.2%	.0%	.0%	100.0%
		Column Percent	.3%	.0%	.5%	.5%	.0%	.0%	.2%
	Asian		845	12	81	20	8	0	966
		Row Percent	87.5%	1.2%	8.4%	2.1%	.8%	.0%	100.0%
		Column Percent	9.7%	4.8%	40.7%	9.3%	6.3%	.0%	9.9%
	Black		135	4	6	4	1	0	150
		Row Percent	90.0%	2.7%	4.0%	2.7%	.7%	.0%	100.0%
		Column Percent	1.5%	1.6%	3.0%	1.9%	.8%	.0%	1.5%
	White		7077	218	96	169	110	0	7670
		Row Percent	92.3%	2.8%	1.3%	2.2%	1.4%	.0%	100.0%
		Column Percent	81.1%	87.2%	48.2%	79.0%	86.6%	.0%	78.6%
	Other Non hispanic		134	2	2	5	0	0	143
		Row Percent	93.7%	1.4%	1.4%	3.5%	.0%	.0%	100.0%
		Column Percent	1.5%	.8%	1.0%	2.3%	.0%	.0%	1.5%
	No answer		330	10	7	10	3	247	607
		Row Percent	54.4%	1.6%	1.2%	1.6%	.5%	40.7%	100.0%
		Column Percent	3.8%	4.0%	3.5%	4.7%	2.4%	100.0%	6.2%
Total			8723	250	199	214	127	247	9760
	Row Percent		89.4%	2.6%	2.0%	2.2%	1.3%	2.5%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.4.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by CITIZENSHIP
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
CITIZENSHIP	Native		7035	219	71	164	108	0	7597
		Row Percent	92.6%	2.9%	.9%	2.2%	1.4%	.0%	100.0%
		Column Percent	80.6%	87.6%	35.7%	76.6%	85.0%	.0%	77.8%
	Naturalized		790	14	6	28	13	0	851
		Row Percent	92.8%	1.6%	.7%	3.3%	1.5%	.0%	100.0%
		Column Percent	9.1%	5.6%	3.0%	13.1%	10.2%	.0%	8.7%
	Permanent resident		672	13	35	17	5	0	742
		Row Percent	90.6%	1.8%	4.7%	2.3%	.7%	.0%	100.0%
		Column Percent	7.7%	5.2%	17.6%	7.9%	3.9%	.0%	7.6%
	Other visa		190	1	86	5	1	0	283
		Row Percent	67.1%	.4%	30.4%	1.8%	.4%	.0%	100.0%
		Column Percent	2.2%	.4%	43.2%	2.3%	.8%	.0%	2.9%
	No answer		36	3	1	0	0	247	287
		Row Percent	12.5%	1.0%	.3%	.0%	.0%	86.1%	100.0%
		Column Percent	.4%	1.2%	.5%	.0%	.0%	100.0%	2.9%
Total			8723	250	199	214	127	247	9760
	Row Percent		89.4%	2.6%	2.0%	2.2%	1.3%	2.5%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by EMPLOYER TYPE
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
EMPLOYER TYPE	Industry		5483	63	8	149	2	2	5707
		Row Percent	96.1%	1.1%	.1%	2.6%	.0%	.0%	100.0%
		Column Percent	64.6%	27.4%	4.4%	74.9%	50.0%	50.0%	62.7%
	Government		631	16	15	13	0	2	677
		Row Percent	93.2%	2.4%	2.2%	1.9%	.0%	.3%	100.0%
		Column Percent	7.4%	7.0%	8.2%	6.5%	.0%	50.0%	7.4%
	Other Nonacademic		310	53	4	7	1	0	375
		Row Percent	82.7%	14.1%	1.1%	1.9%	.3%	.0%	100.0%
		Column Percent	3.7%	23.0%	2.2%	3.5%	25.0%	.0%	4.1%
	High School		138	5	0	1	0	0	144
		Row Percent	95.8%	3.5%	.0%	.7%	.0%	.0%	100.0%
		Column Percent	1.6%	2.2%	.0%	.5%	.0%	.0%	1.6%
	College or University		1922	93	156	29	1	0	2201
		Row Percent	87.3%	4.2%	7.1%	1.3%	.0%	.0%	100.0%
		Column Percent	22.7%	40.4%	85.2%	14.6%	25.0%	.0%	24.2%
	No answer		239	20	16	15	123	243	656
		Row Percent	—	—	—	—	—	—	—
		Column Percent	2.8%	8.7%	8.7%	7.5%	3075.0%	6075.0%	7.2%
Total			8723	250	199	214	127	247	9760
	Row Percent		95.8%	2.7%	2.2%	2.4%	1.4%	2.7%	107.2%
	Column Percent		102.8%	108.7%	108.7%	107.5%	3175.0%	6175.0%	107.2%

Table 8.5.2

EMPLOYMENT STATUS OF INDUSTRIAL CHEMISTS
by TYPE OF INDUSTRY
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
NONACADEMIC EMPLOYER	Analytical serv lab		187	4	0	8	1	1	201
		Row Percent	93.0%	2.0%	.0%	4.0%	.5%	.5%	100.0%
		Column Percent	3.4%	6.3%	.0%	5.4%	50.0%	50.0%	3.5%
	Contract res firm		168	5	0	11	0	0	184
		Row Percent	91.3%	2.7%	.0%	6.0%	.0%	.0%	100.0%
		Column Percent	3.1%	7.9%	.0%	7.4%	.0%	.0%	3.2%
	Utility		42	0	0	1	0	0	43
		Row Percent	97.7%	.0%	.0%	2.3%	.0%	.0%	100.0%
		Column Percent	.8%	.0%	.0%	.7%	.0%	.0%	.8%
	Other nonmanuf		278	14	1	10	1	0	304
		Row Percent	91.4%	4.6%	.3%	3.3%	.3%	.0%	100.0%
		Column Percent	5.1%	22.2%	12.5%	6.7%	50.0%	.0%	5.3%
	Aerospace		70	1	0	2	0	0	73
		Row Percent	95.9%	1.4%	.0%	2.7%	.0%	.0%	100.0%
		Column Percent	1.3%	1.6%	.0%	1.3%	.0%	.0%	1.3%
	Ag chemicals		193	2	0	5	0	0	200
		Row Percent	96.5%	1.0%	.0%	2.5%	.0%	.0%	100.0%
		Column Percent	3.5%	3.2%	.0%	3.4%	.0%	.0%	3.5%
	Basic chemicals		205	1	0	4	0	0	210
		Row Percent	97.6%	.5%	.0%	1.9%	.0%	.0%	100.0%
		Column Percent	3.7%	1.6%	.0%	2.7%	.0%	.0%	3.7%
	Biochemical prods		75	0	0	2	0	0	77
		Row Percent	97.4%	.0%	.0%	2.6%	.0%	.0%	100.0%
		Column Percent	1.4%	.0%	.0%	1.3%	.0%	.0%	1.3%
	Building materials		27	0	0	0	0	0	27
		Row Percent	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
		Column Percent	.5%	.0%	.0%	.0%	.0%	.0%	.5%
	Coatings, inks, paints		237	4	0	6	0	0	247
		Row Percent	96.0%	1.6%	.0%	2.4%	.0%	.0%	100.0%
		Column Percent	4.3%	6.3%	.0%	4.0%	.0%	.0%	4.3%
	Electronics/semi conductors		165	2	1	6	0	0	174
		Row Percent	94.8%	1.1%	.6%	3.4%	.0%	0%	100.0%
		Column Percent	3.0%	3.2%	12.5%	4.0%	.0%	.0%	3.0%
	Food		148	2	0	7	0	0	157
		Row Percent	94.3%	1.3%	.0%	4.5%	.0%	.0%	100.0%
		Column Percent	2.7%	3.2%	.0%	4.7%	.0%	.0%	2.8%
	Instruments		136	2	0	4	0	0	142
		Row Percent	95.8%	1.4%	.0%	2.8%	.0%	.0%	100.0%
		Column Percent	2.5%	3.2%	.0%	2.7%	.0%	.0%	2.5%
	Medical devices		209	4	0	10	0	0	223
		Row Percent	93.7%	1.8%	.0%	4.5%	.0%	.0%	100.0%
		Column Percent	3.8%	6.3%	.0%	6.7%	.0%	.0%	3.9%
	Metals		68	0	0	2	0	0	70
		Row Percent	97.1%	.0%	.0%	2.9%	.0%	.0%	100.0%
		Column Percent	1.2%	.0%	.0%	1.3%	.0%	.0%	1.2%
	Paper		45	0	0	4	0	0	49
		Row Percent	91.8%	.0%	.0%	8.2%	.0%	.0%	100.0%
		Column Percent	.8%	.0%	.0%	2.7%	.0%	.0%	.9%
	Personal Care		61	1	0	1	0	0	63
		Row Percent	96.8%	1.6%	.0%	1.6%	.0%	.0%	100.0%
		Column Percent	1.1%	1.6%	.0%	.7%	.0%	.0%	1.1%

Table 8.5.2 continued

EMPLOYMENT STATUS OF INDUSTRIAL CHEMISTS
by TYPE OF INDUSTRY
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
NONACADEMIC EMPLOYER	Petroleum		191	1	1	10	0	1	204
		Row Percent	93.6%	.5%	.5%	4.9%	.0%	.5%	100.0%
		Column Percent	3.5%	1.6%	12.5%	6.7%	.0%	50.0%	3.6%
	Pharmaceuticals		1407	10	4	20	0	0	1441
		Row Percent	97.6%	.7%	.3%	1.4%	.0%	.0%	100.0%
		Column Percent	25.7%	15.9%	50.0%	13.4%	.0%	.0%	25.2%
	Plastics		248	1	0	6	0	0	255
		Row Percent	97.3%	.4%	.0%	2.4%	.0%	.0%	100.0%
		Column Percent	4.5%	1.6%	.0%	4.0%	.0%	.0%	4.5%
	Rubber		84	0	0	1	0	0	85
		Row Percent	98.8%	.0%	.0%	1.2%	.0%	.0%	100.0%
		Column Percent	1.5%	.0%	.0%	.7%	.0%	.0%	1.5%
	Soaps		98	1	0	2	0	0	101
		Row Percent	97.0%	1.0%	.0%	2.0%	.0%	.0%	100.0%
		Column Percent	1.8%	1.6%	.0%	1.3%	.0%	.0%	1.8%
	Specialty chems		552	6	1	14	0	0	573
		Row Percent	96.3%	1.0%	.2%	2.4%	.0%	.0%	100.0%
		Column Percent	10.1%	9.5%	12.5%	9.4%	.0%	.0%	10.0%
	Textiles		31	0	0	3	0	0	34
		Row Percent	91.2%	.0%	.0%	8.8%	.0%	.0%	100.0%
		Column Percent	.6%	.0%	.0%	2.0%	.0%	.0%	.6%
	Other manufacturing		558	2	0	10	0	0	570
		Row Percent	97.9%	.4%	.0%	1.8%	.0%	.0%	100.0%
		Column Percent	10.2%	3.2%	.0%	6.7%	.0%	.0%	10.0%
Total			5483	63	8	149	2	2	5707
	Row Percent		96.1%	1.1%	.1%	2.6%	.0%	.0%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.5.3

EMPLOYMENT STATUS OF ACADEMIC CHEMISTS
by INSTITUTIONAL TYPE
1999 Survey of ACS Members

			EMPLOYMENT STATUS					
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	Total
INSTITUTIONAL TYPE	AA-granting		146	13	0	3	0	162
		Row Percent	90.1%	8.0%	.0%	1.9%	.0%	100.0%
		Column Percent	7.6%	14.0%	.0%	10.3%	.0%	7.4%
	BS-granting		487	20	2	3	0	512
		Row Percent	95.1%	3.9%	.4%	.6%	.0%	100.0%
		Column Percent	25.3%	21.5%	1.3%	10.3%	.0%	23.3%
	MS-granting		217	17	5	4	0	243
		Row Percent	89.3%	7.0%	2.1%	1.6%	.0%	100.0%
		Column Percent	11.3%	18.3%	3.2%	13.8%	.0%	11.0%
	PhD-granting		858	33	117	12	1	1021
		Row Percent	84.0%	3.2%	11.5%	1.2%	.1%	100.0%
		Column Percent	44.6%	35.5%	75.0%	41.4%	100.0%	46.4%
	Medical school		214	10	32	7	0	263
		Row Percent	81.4%	3.8%	12.2%	2.7%	.0%	100.0%
		Column Percent	11.1%	10.8%	20.5%	24.1%	.0%	11.9%
Total			1922	93	156	29	1	2201
	Row Percent		87.3%	4.2%	7.1%	1.3%	.0%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.6.1

EMPLOYMENT STATUS OF NON-ACADEMIC CHEMISTS
by WORK FUNCTION
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
WORK FUNCTION	Analytical services		871	20	0	30	0	0	921
		Row Percent	94.6%	2.2%	.0%	3.3%	.0%	.0%	100.0%
		Column Percent	13.6%	15.2%	.0%	17.8%	.0%	.0%	13.6%
	Chemical info		79	5	0	4	0	0	88
		Row Percent	89.8%	5.7%	.0%	4.5%	.0%	.0%	100.0%
		Column Percent	1.2%	3.8%	.0%	2.4%	.0%	.0%	1.3%
	Computers		61	4	0	1	0	0	66
		Row Percent	92.4%	6.1%	.0%	1.5%	.0%	.0%	100.0%
		Column Percent	.9%	3.0%	.0%	.6%	.0%	.0%	1.0%
	Consulting		136	32	0	6	1	0	175
		Row Percent	77.7%	18.3%	.0%	3.4%	.6%	.0%	100.0%
		Column Percent	2.1%	24.2%	.0%	3.6%	33.3%	.0%	2.6%
	Forensics		75	1	0	0	0	0	76
		Row Percent	98.7%	1.3%	.0%	.0%	.0%	.0%	100.0%
		Column Percent	1.2%	.8%	.0%	.0%	.0%	.0%	1.1%
	General mgmt		386	3	0	3	0	0	392
		Row Percent	98.5%	.8%	.0%	.8%	.0%	.0%	100.0%
		Column Percent	6.0%	2.3%	.0%	1.8%	.0%	.0%	5.8%
	Health & Safety		213	5	0	7	0	0	225
		Row Percent	94.7%	2.2%	.0%	3.1%	.0%	.0%	100.0%
		Column Percent	3.3%	3.8%	.0%	4.1%	.0%	.0%	3.3%
	Marketing,sales		310	4	0	9	0	0	323
		Row Percent	96.0%	1.2%	.0%	2.8%	.0%	.0%	100.0%
		Column Percent	4.8%	3.0%	.0%	5.3%	.0%	.0%	4.8%
	Patents		49	4	0	0	1	0	54
		Row Percent	90.7%	7.4%	.0%	.0%	1.9%	.0%	100.0%
		Column Percent	.8%	3.0%	.0%	.0%	33.3%	.0%	.8%
	Production, QC		593	5	0	16	0	0	614
		Row Percent	96.6%	.8%	.0%	2.6%	.0%	.0%	100.0%
		Column Percent	9.2%	3.8%	.0%	9.5%	.0%	.0%	9.1%
	Applied Research		2086	21	12	58	0	0	2177
		Row Percent	95.8%	1.0%	.6%	2.7%	.0%	.0%	100.0%
		Column Percent	32.5%	15.9%	44.4%	34.3%	.0%	.0%	32.2%
	Basic Research		520	9	15	11	0	0	555
		Row Percent	93.7%	1.6%	2.7%	2.0%	.0%	.0%	100.0%
		Column Percent	8.1%	6.8%	55.6%	6.5%	.0%	.0%	8.2%
	R&D mgmt		741	6	0	13	0	0	760
		Row Percent	97.5%	.8%	.0%	1.7%	.0%	.0%	100.0%
		Column Percent	11.5%	4.5%	.0%	7.7%	.0%	.0%	11.2%
	Training		21	2	0	1	0	[illegible]	24
		Row Percent	87.5%	8.3%	.0%	4.2%	.0%	.0%	100.0%
		Column Percent	.3%	1.5%	.0%	.6%	.0%	.0%	.4%
	Other function		259	11	0	9	0	0	279
		Row Percent	92.8%	3.9%	.0%	3.2%	.0%	.0%	100.0%
		Column Percent	4.0%	8.3%	.0%	5.3%	.0%	.0%	4.1%
	No answer		24	0	0	1	1	4	30
		Row Percent	80.0%	.0%	.0%	3.3%	3.3%	13.3%	100.0%
		Column Percent	.4%	.0%	.0%	.6%	33.3%	100.0%	.4%
Total			6424	132	27	169	3	4	6759
	Row Percent		95.0%	2.0%	.4%	2.5%	.0%	.1%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.7.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by SPECIALTY
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
SPEC	Ag/Food chemistry		285	10	0	9	3	12	319
		Row Percent	89.3%	3.1%	.0%	2.8%	.9%	3.8%	100.0%
		Column Percent	3.3%	4.0%	.0%	4.2%	2.4%	4.9%	3.3%
	Analytical chemistry		1593	23	20	46	14	37	1733
		Row Percent	91.9%	1.3%	1.2%	2.7%	.8%	2.1%	100.0%
		Column Percent	18.3%	9.2%	10.1%	21.5%	11.0%	15.0%	17.8%
	Biochemistry		422	15	31	6	6	8	488
		Row Percent	86.5%	3.1%	6.4%	1.2%	1.2%	1.6%	100.0%
		Column Percent	4.8%	6.0%	15.6%	2.8%	4.7%	3.2%	5.0%
	Biotechnology		252	8	7	10	4	2	283
		Row Percent	89.0%	2.8%	2.5%	3.5%	1.4%	.7%	100.0%
		Column Percent	2.9%	3.2%	3.5%	4.7%	3.1%	.8%	2.9%
	Chemical education		570	40	1	3	10	17	641
		Row Percent	88.9%	6.2%	.2%	.5%	1.6%	2.7%	100.0%
		Column Percent	6.5%	16.0%	.5%	1.4%	7.9%	6.9%	6.6%
	Clinical chemistry		84	6	1	2	4	4	101
		Row Percent	83.2%	5.9%	1.0%	2.0%	4.0%	4.0%	100.0%
		Column Percent	1.0%	2.4%	.5%	.9%	3.1%	1.6%	1.0%
	Environmental chemistry		634	24	6	21	20	23	728
		Row Percent	87.1%	3.3%	.8%	2.9%	2.7%	3.2%	100.0%
		Column Percent	7.3%	9.6%	3.0%	9.8%	15.7%	9.3%	7.5%
	General chemistry		273	12	0	4	2	9	300
		Row Percent	91.0%	4.0%	.0%	1.3%	.7%	3.0%	100.0%
		Column Percent	3.1%	4.8%	.0%	1.9%	1.6%	3.6%	3.1%
	Inorganic chemistry		321	8	13	9	4	6	361
		Row Percent	88.9%	2.2%	3.6%	2.5%	1.1%	1.7%	100.0%
		Column Percent	3.7%	3.2%	6.5%	4.2%	3.1%	2.4%	3.7%
	Materials science		376	7	13	12	3	9	420
		Row Percent	89.5%	1.7%	3.1%	2.9%	.7%	2.1%	100.0%
		Column Percent	4.3%	2.8%	6.5%	5.6%	2.4%	3.6%	4.3%
	Medicinal-Pharmaceutical		802	12	15	14	9	14	866
		Row Percent	92.6%	1.4%	1.7%	1.6%	1.0%	1.6%	100.0%
		Column Percent	9.2%	4.8%	7.5%	6.5%	7.1%	5.7%	8.9%
	Organic chemistry		986	16	53	24	10	35	1124
		Row Percent	87.7%	1.4%	4.7%	2.1%	.9%	3.1%	100.0%
		Column Percent	11.3%	6.4%	26.6%	11.2%	7.9%	14.2%	11.5%
	Physical chemistry		400	14	28	14	4	13	473
		Row Percent	84.6%	3.0%	5.9%	3.0%	.8%	2.7%	100.0%
		Column Percent	4.6%	5.6%	14.1%	6.5%	3.1%	5.3%	4.8%
	Polymer chemistry		807	20	7	17	16	26	893
		Row Percent	90.4%	2.2%	.8%	1.9%	1.8%	2.9%	100.0%
		Column Percent	9.3%	8.0%	3.5%	7.9%	12.6%	10.5%	9.1%
	Other chemical science		240	12	3	7	3	9	274
		Row Percent	87.6%	4.4%	1.1%	2.6%	1.1%	3.3%	100.0%
		Column Percent	2.8%	4.8%	1.5%	3.3%	2.4%	3.6%	2.8%
	Business Administration		177	1	0	2	4	9	193
		Row Percent	91.7%	.5%	.0%	1.0%	2.1%	4.7%	100.0%
		Column Percent	2.0%	.4%	.0%	.9%	3.1%	3.6%	2.0%

Table 8.7.1 continued

EMPLOYMENT STATUS OF ALL CHEMISTS
by SPECIALTY
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
SPEC	Computer science		88	4	0	3	1	0	96
		Row Percent	91.7%	4.2%	.0%	3.1%	1.0%	.0%	100.0%
		Column Percent	1.0%	1.6%	.0%	1.4%	.8%	.0%	1.0%
	Law		49	3	0	1	1	1	55
		Row Percent	89.1%	5.5%	.0%	1.8%	1.8%	1.8%	100.0%
		Column Percent	.6%	1.2%	.0%	.5%	.8%	.4%	.6%
	More than one		364	15	1	10	9	13	412
		Row Percent	88.3%	3.6%	.2%	2.4%	2.2%	3.2%	100.0%
		Column Percent	4.2%	6.0%	.5%	4.7%	7.1%	5.3%	4.2%
Total			8723	250	199	214	127	247	9760
	Row Percent		89.4%	2.6%	2.0%	2.2%	1.3%	2.5%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8.8.1

EMPLOYMENT STATUS OF ALL CHEMISTS
by GEOGRAPHIC REGION
1999 Survey of ACS Members

			EMPLOYMENT STATUS						
			Full- time	Part- time	Postdoc	Seeking empl	Not seeking empl	No answer	Total
GEOGRAPHIC REGION	Pacific		1132	45	26	25	0	0	1228
		Row Percent	92.2%	3.7%	2.1%	2.0%	.0%	.0%	100.0%
		Column Percent	13.0%	18.0%	13.1%	11.7%	.0%	.0%	12.6%
	Mountain		420	12	17	16	0	0	465
		Row Percent	90.3%	2.6%	3.7%	3.4%	.0%	.0%	100.0%
		Column Percent	4.8%	4.8%	8.5%	7.5%	.0%	.0%	4.8%
	West North Central		621	17	12	9	0	0	659
		Row Percent	94.2%	2.6%	1.8%	1.4%	.0%	.0%	100.0%
		Column Percent	7.1%	6.8%	6.0%	4.2%	.0%	.0%	6.8%
	West South Central		630	18	20	21	2	0	691
		Row Percent	91.2%	2.6%	2.9%	3.0%	.3%	.0%	100.0%
		Column Percent	7.2%	7.2%	10.1%	9.8%	1.6%	.0%	7.1%
	East North Central		1636	49	30	38	0	0	1753
		Row Percent	93.3%	2.8%	1.7%	2.2%	.0%	.0%	100.0%
		Column Percent	18.8%	19.6%	15.1%	17.8%	.0%	.0%	18.0%
	East South Central		304	5	11	4	0	0	324
		Row Percent	93.8%	1.5%	3.4%	1.2%	.0%	.0%	100.0%
		Column Percent	3.5%	2.0%	5.5%	1.9%	.0%	.0%	3.3%
	Middle Atlantic		1774	44	34	40	1	0	1893
		Row Percent	93.7%	2.3%	1.8%	2.1%	.1%	.0%	100.0%
		Column Percent	20.3%	17.6%	17.1%	18.7%	.8%	.0%	19.4%
	South Atlantic		1453	42	27	31	0	0	1553
		Row Percent	93.6%	2.7%	1.7%	2.0%	.0%	.0%	100.0%
		Column Percent	16.7%	16.8%	13.6%	14.5%	.0%	.0%	15.9%
	New England		753	18	22	30	124	247	1194
		Row Percent	63.1%	1.5%	1.8%	2.5%	10.4%	20.7%	100.0%
		Column Percent	8.6%	7.2%	11.1%	14.0%	97.6%	100.0%	12.2%
Total			8723	250	199	214	127	247	9760
	Row Percent		89.4%	2.6%	2.0%	2.2%	1.3%	2.5%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table9.1.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1999
by HIGHEST DEGREE
1999 Survey of ACS Members

			LENGTH OF UNEMPLOYMENT						
			Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	No answer	Total
HIGHEST DEGREE	BS		10	7	11	11	15	0	54
		Row Percent	18.5%	13.0%	20.4%	20.4%	27.8%	.0%	100.0%
		Column Percent	52.6%	16.3%	26.2%	26.8%	22.7%	.0%	25.6%
	MS		2	12	4	9	9	0	36
		Row Percent	5.6%	33.3%	11.1%	25.0%	25.0%	.0%	100.0%
		Column Percent	10.5%	27.9%	9.5%	22.0%	13.6%	.0%	17.1%
	PhD		7	24	27	21	42	2	123
		Row Percent	5.8%	19.8%	22.3%	17.4%	34.7%	1.7%	101.7%
		Column Percent	36.8%	55.8%	64.3%	51.2%	63.6%	—	58.3%
Total			19	43	42	41	66	2	213
	Row Percent		9.0%	20.4%	19.9%	19.4%	31.3%	.9%	100.9%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	—	100.9%

Table 9.2.1

LENGTH OF UNEMPLOYMENT OF CHEMISTS UNEMPLOYED on MARCH 1, 1999
by AGE
1999 Survey of ACS Members

			LENGTH OF UNEMPLOYMENT						
			Less than 1 mo	1-3 mos	4-6 mos	7-12 mos	More than 1 yr	No answer	Total
AGE	20-24		1	0	1	0	3	0	5
		Row Percent	20.0%	.0%	20.0%	.0%	60.0%	.0%	100.0%
		Column Percent	5.3%	.0%	2.4%	.0%	4.5%	.0%	2.4%
	25-29		0	4	0	1	1	0	6
		Row Percent	.0%	66.7%	.0%	16.7%	16.7%	.0%	100.0%
		Column Percent	.0%	9.3%	.0%	2.4%	1.5%	.0%	2.8%
	30-34		2	2	3	7	1	1	16
		Row Percent	13.3%	13.3%	20.0%	46.7%	6.7%	6.7%	106.7%
		Column Percent	10.5%	4.7%	7.1%	17.1%	1.5%	—	7.6%
	35-39		4	7	8	6	10	0	35
		Row Percent	11.4%	20.0%	22.9%	17.1%	28.6%	.0%	100.0%
		Column Percent	21.1%	16.3%	19.0%	14.6%	15.2%	.0%	16.6%
	40-44		2	7	9	5	8	0	31
		Row Percent	6.5%	22.6%	29.0%	16.1%	25.8%	.0%	100.0%
		Column Percent	10.5%	16.3%	21.4%	12.2%	12.1%	.0%	14.7%
	45-49		1	7	3	3	9	0	23
		Row Percent	4.3%	30.4%	13.0%	13.0%	39.1%	.0%	100.0%
		Column Percent	5.3%	16.3%	7.1%	7.3%	13.6%	.0%	10.9%
	40-54		1	8	5	8	12	0	34
		Row Percent	2.9%	23.5%	14.7%	23.5%	35.3%	.0%	100.0%
		Column Percent	5.3%	18.6%	11.9%	19.5%	18.2%	.0%	16.1%
	55-59		2	6	7	8	12	0	35
		Row Percent	5.7%	17.1%	20.0%	22.9%	34.3%	.0%	100.0%
		Column Percent	10.5%	14.0%	16.7%	19.5%	18.2%	.0%	16.6%
	60-64		6	1	5	2	7	0	21
		Row Percent	28.6%	4.8%	23.8%	9.5%	33.3%	.0%	100.0%
		Column Percent	31.6%	2.3%	11.9%	4.9%	10.6%	.0%	10.0%
	65-69		0	1	1	1	3	1	7
		Row Percent	.0%	16.7%	16.7%	16.7%	50.0%	16.7%	116.7%
		Column Percent	.0%	2.3%	2.4%	2.4%	4.5%	—	3.3%
Total			19	43	42	41	66	2	213
	Row Percent		9.0%	20.4%	19.9%	19.4%	31.3%	.9%	100.9%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	—	100.9%

Table 10.1.1

ALL RESPONDENTS
by SEX and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			Less than BS	BA/BS	MS	PhD	Total
SEX	Men		1568	1282	4984	86	7920
		Row Percent	19.8%	16.2%	62.9%	1.1%	100.0%
		Column Percent	65.6%	67.9%	80.4%	68.3%	74.7%
	Women		743	532	1017	31	2323
		Row Percent	32.0%	22.9%	43.8%	1.3%	100.0%
		Column Percent	31.1%	28.2%	16.4%	24.6%	21.9%
	No answer		81	73	199	9	362
		Row Percent	22.4%	20.2%	55.0%	2.5%	100.0%
		Column Percent	3.4%	3.9%	3.2%	7.1%	3.4%
Total			2392	1887	6200	126	10605
	Row Percent		22.6%	17.8%	58.5%	1.2%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.2.1

ALL RESPONDENTS
by AGE and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			Less than BS	BA/BS	MS	PhD	Total
AGE	20-29		515	127	138	3	783
		Row Percent	65.8%	16.2%	17.6%	.4%	100.0%
		Column Percent	21.5%	6.7%	2.2%	2.4%	7.4%
	30-39		596	460	1680	17	2753
		Row Percent	21.6%	16.7%	61.0%	.6%	100.0%
		Column Percent	24.9%	24.4%	27.1%	13.5%	26.0%
	40-49		646	579	1765	49	3039
		Row Percent	21.3%	19.1%	58.1%	1.6%	100.0%
		Column Percent	27.0%	30.7%	28.5%	38.9%	28.7%
	50-59		409	522	1779	29	2739
		Row Percent	14.9%	19.1%	65.0%	1.1%	100.0%
		Column Percent	17.1%	27.7%	28.7%	23.0%	25.8%
	60-69		144	123	653	21	941
		Row Percent	15.3%	13.1%	69.4%	2.2%	100.0%
		Column Percent	6.0%	6.5%	10.5%	16.7%	8.9%
	70 years		0	1	4	0	5
		Row Percent	.0%	20.0%	80.0%	.0%	100.0%
		Column Percent	.0%	.1%	.1%	.0%	.0%
	No answer		82	75	181	7	345
		Row Percent	23.8%	21.7%	52.5%	2.0%	100.0%
		Column Percent	3.4%	4.0%	2.9%	5.6%	3.3%
Total			2392	1887	6200	126	10605
	Row Percent		22.6%	17.8%	58.5%	1.2%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.2.2

MEN RESPONDENTS
by AGE and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			Less than BS	BA/BS	MS	PhD	Total
AGE	20-29		275	74	85	3	437
		Row Percent	62.9%	16.9%	19.5%	.7%	100.0%
		Column Percent	17.5%	5.8%	1.7%	3.5%	5.5%
	30-39		365	275	1243	9	1892
		Row Percent	19.3%	14.5%	65.7%	.5%	100.0%
		Column Percent	23.3%	21.5%	24.9%	10.5%	23.9%
	40-49		471	415	1459	33	2378
		Row Percent	19.8%	17.5%	61.4%	1.4%	100.0%
		Column Percent	30.0%	32.4%	29.3%	38.4%	30.0%
	50-59		315	404	1573	25	2317
		Row Percent	13.6%	17.4%	67.9%	1.1%	100.0%
		Column Percent	20.1%	31.5%	31.6%	29.1%	29.3%
	60-69		133	104	600	16	853
		Row Percent	15.6%	12.2%	70.3%	1.9%	100.0%
		Column Percent	8.5%	8.1%	12.0%	18.6%	10.8%
	70 years		0	0	4	0	4
		Row Percent	.0%	.0%	100.0%	.0%	100.0%
		Column Percent	.0%	.0%	.1%	.0%	.1%
	No answer		9	10	20	0	39
		Row Percent	23.1%	25.6%	51.3%	.0%	100.0%
		Column Percent	.6%	.8%	.4%	.0%	.5%
Total			1568	1282	4984	86	7920
	Row Percent		19.8%	16.2%	62.9%	1.1%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.2.3

WOMEN RESPONDENTS
by AGE and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			Less than BS	BA/BS	MS	PhD	Total
AGE	20-29		238	52	52	0	342
		Row Percent	69.6%	15.2%	15.2%	.0%	100.0%
		Column Percent	32.0%	9.8%	5.1%	.0%	14.7%
	30-39		229	181	426	8	844
		Row Percent	27.1%	21.4%	50.5%	.9%	100.0%
		Column Percent	30.8%	34.0%	41.9%	25.8%	36.3%
	40-49		169	163	292	15	639
		Row Percent	26.4%	25.5%	45.7%	2.3%	100.0%
		Column Percent	22.7%	30.6%	28.7%	48.4%	27.5%
	50-59		93	115	193	4	405
		Row Percent	23.0%	28.4%	47.7%	1.0%	100.0%
		Column Percent	12.5%	21.6%	19.0%	12.9%	17.4%
	60-69		10	18	48	4	80
		Row Percent	12.5%	22.5%	60.0%	5.0%	100.0%
		Column Percent	1.3%	3.4%	4.7%	12.9%	3.4%
	70 years		0	1	0	0	1
		Row Percent	.0%	100.0%	.0%	.0%	100.0%
		Column Percent	.0%	.2%	.0%	.0%	.0%
	No answer		4	2	6	0	12
		Row Percent	33.3%	16.7%	50.0%	.0%	100.0%
		Column Percent	.5%	.4%	.6%	.0%	.5%
Total			743	532	1017	31	2323
	Row Percent		32.0%	22.9%	43.8%	1.3%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.3.1

ALL RESPONDENTS
by WORK SPECIALTY and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			Less than BS	BA/BS	MS	PhD	Total
WORK SPECIALTY	Chemical engineering		104	115	238	7	464
		Row Percent	22.4%	24.8%	51.3%	1.5%	100.0%
		Column Percent	4.3%	6.1%	3.8%	5.6%	4.4%
	Ag/Food chemistry		79	58	177	5	319
		Row Percent	24.8%	18.2%	55.5%	1.6%	100.0%
		Column Percent	3.3%	3.1%	2.9%	4.0%	3.0%
	Analytical chemistry		633	346	729	25	1733
		Row Percent	36.5%	20.0%	42.1%	1.4%	100.0%
		Column Percent	26.5%	18.3%	11.8%	19.8%	16.3%
	Biochemistry		43	32	409	4	488
		Row Percent	8.8%	6.6%	83.8%	.8%	100.0%
		Column Percent	1.8%	1.7%	6.6%	3.2%	4.6%
	Biotechnology		41	29	210	3	283
		Row Percent	14.5%	10.2%	74.2%	1.1%	100.0%
		Column Percent	1.7%	1.5%	3.4%	2.4%	2.7%
	Chemical education		44	152	439	6	641
		Row Percent	6.9%	23.7%	68.5%	.9%	100.0%
		Column Percent	1.8%	8.1%	7.1%	4.8%	6.0%
	Clinical chemistry		17	24	59	1	101
		Row Percent	16.8%	23.8%	58.4%	1.0%	100.0%
		Column Percent	.7%	1.3%	1.0%	.8%	1.0%
	Environmental chemistry		243	173	303	9	728
		Row Percent	33.4%	23.8%	41.6%	1.2%	100.0%
		Column Percent	10.2%	9.2%	4.9%	7.1%	6.9%
	General chemistry		148	54	96	2	300
		Row Percent	49.3%	18.0%	32.0%	.7%	100.0%
		Column Percent	6.2%	2.9%	1.5%	1.6%	2.8%
	Inorganic chemistry		62	30	265	4	361
		Row Percent	17.2%	8.3%	73.4%	1.1%	100.0%
		Column Percent	2.6%	1.6%	4.3%	3.2%	3.4%
	Materials science		73	65	279	3	420
		Row Percent	17.4%	15.5%	66.4%	.7%	100.0%
		Column Percent	3.1%	3.4%	4.5%	2.4%	4.0%
	Medicinal-Pharmaceutical		161	144	556	5	866
		Row Percent	18.6%	16.6%	64.2%	.6%	100.0%
		Column Percent	6.7%	7.6%	9.0%	4.0%	8.2%
	Organic chemistry		178	142	798	6	1124
		Row Percent	15.8%	12.6%	71.0%	.5%	100.0%
		Column Percent	7.4%	7.5%	12.9%	4.8%	10.6%

Table 10.3.1 continued

ALL RESPONDENTS
by WORK SPECIALTY and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			Less than BS	BA/BS	MS	PhD	Total
WORK SPECIALTY	Physical chemistry		26	18	428	1	473
		Row Percent	5.5%	3.8%	90.5%	.2%	100.0%
		Column Percent	1.1%	1.0%	6.9%	.8%	4.5%
	Polymer chemistry		223	135	525	10	893
		Row Percent	25.0%	15.1%	58.8%	1.1%	100.0%
		Column Percent	9.3%	7.2%	8.5%	7.9%	8.4%
	Other chemical science		68	61	145	0	274
		Row Percent	24.8%	22.3%	52.9%	.0%	100.0%
		Column Percent	2.8%	3.2%	2.3%	.0%	2.6%
	Business Administration		52	91	123	3	269
		Row Percent	19.3%	33.8%	45.7%	1.1%	100.0%
		Column Percent	2.2%	4.8%	2.0%	2.4%	2.5%
	Computer science		25	25	69	0	119
		Row Percent	21.0%	21.0%	58.0%	.0%	100.0%
		Column Percent	1.0%	1.3%	1.1%	.0%	1.1%
	Law		8	11	48	17	84
		Row Percent	9.5%	13.1%	57.1%	20.2%	100.0%
		Column Percent	.3%	.6%	.8%	13.5%	.8%
	Other nonchemistry		152	178	287	12	629
		Row Percent	24.2%	28.3%	45.6%	1.9%	100.0%
		Column Percent	6.4%	9.4%	4.6%	9.5%	5.9%
	No answer		12	4	17	3	36
		Row Percent	33.3%	11.1%	47.2%	8.3%	100.0%
		Column Percent	.5%	.2%	.3%	2.4%	.3%
Total			2392	1887	6200	126	10605
	Row Percent		22.6%	17.8%	58.5%	1.2%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.4.1

ALL RESPONDENTS
by RACE/ETHNICITY and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			Less than BS	BA/BS	MS	PhD	Total
RACER	Hispanic		55	33	128	4	220
		Row Percent	25.0%	15.0%	58.2%	1.8%	100.0%
		Column Percent	2.3%	1.7%	2.1%	3.2%	2.1%
	American Indian		10	5	12	0	27
		Row Percent	37.0%	18.5%	44.4%	.0%	100.0%
		Column Percent	.4%	.3%	.2%	.0%	.3%
	Asian		118	164	763	7	1052
		Row Percent	11.2%	15.6%	72.5%	.7%	100.0%
		Column Percent	4.9%	8.7%	12.3%	5.6%	9.9%
	Black		59	30	71	5	165
		Row Percent	35.8%	18.2%	43.0%	3.0%	100.0%
		Column Percent	2.5%	1.6%	1.1%	4.0%	1.6%
	White		1988	1480	4753	93	8314
		Row Percent	23.9%	17.8%	57.2%	1.1%	100.0%
		Column Percent	83.1%	78.4%	76.7%	73.8%	78.4%
	Other Non hispanic		37	31	86	6	160
		Row Percent	23.1%	19.4%	53.8%	3.8%	100.0%
		Column Percent	1.5%	1.6%	1.4%	4.8%	1.5%
	No answer		125	144	387	11	667
		Row Percent	18.7%	21.6%	58.0%	1.6%	100.0%
		Column Percent	5.2%	7.6%	6.2%	8.7%	6.3%
Total			2392	1887	6200	126	10605
	Row Percent		22.6%	17.8%	58.5%	1.2%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%

Table10.5.1 **ALL RESPONDENTS by RACE/ETHNICITY and SEX 1999 Survey of ACS Members**

			SEX			
			Men	Women	No answer	Total
RACE	Hispanic		149	67	4	220
		Row Percent	67.7%	30.5%	1.8%	100.0%
		Column Percent	1.9%	2.9%	1.1%	2.1%
	American Indian		20	7	0	27
		Row Percent	74.1%	25.9%	.0%	100.0%
		Column Percent	.3%	.3%	.0%	.3%
	Asian		787	255	10	1052
		Row Percent	74.8%	24.2%	1.0%	100.0%
		Column Percent	9.9%	11.0%	2.8%	9.9%
	Black		105	60	0	165
		Row Percent	63.6%	36.4%	.0%	100.0%
		Column Percent	1.3%	2.6%	.0%	1.6%
	White		6423	1850	41	8314
		Row Percent	77.3%	22.3%	.5%	100.0%
		Column Percent	81.1%	79.6%	11.3%	78.4%
	Other Non hispanic		140	18	2	160
		Row Percent	87.5%	11.3%	1.3%	100.0%
		Column Percent	1.8%	.8%	.6%	1.5%
	No answer		296	66	305	667
		Row Percent	44.4%	9.9%	45.7%	100.0%
		Column Percent	3.7%	2.8%	84.3%	6.3%
Total			7920	2323	362	10605
	Row Percent		74.7%	21.9%	3.4%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%

Table10.6.1

ALL RESPONDENTS
by RACE/ETHNICITY and CITIZENSHIP
1999 Survey of ACS Members

			CITIZENSHIP					
			Native	Naturalized	Permanent resident	Other visa	No answer	Total
RACE	Hispanic		121	60	31	7	1	220
		Row Percent	55.3%	27.4%	14.2%	3.2%	.5%	100.5%
		Column Percent	1.5%	6.5%	4.0%	2.3%	—	2.1%
	American Indian		23	3	1	0	0	27
		Row Percent	85.2%	11.1%	3.7%	.0%	.0%	100.0%
		Column Percent	.3%	.3%	.1%	.0%	.0%	.3%
	Asian		113	430	343	162	4	1052
		Row Percent	10.8%	41.0%	32.7%	15.5%	.4%	100.4%
		Column Percent	1.4%	46.2%	43.8%	53.6%	—	10.2%
	Black		112	32	14	7	0	165
		Row Percent	67.9%	19.4%	8.5%	4.2%	.0%	100.0%
		Column Percent	1.4%	3.4%	1.8%	2.3%	.0%	1.6%
	White		7550	319	327	105	13	8314
		Row Percent	91.0%	3.8%	3.9%	1.3%	.2%	100.2%
		Column Percent	91.2%	34.3%	41.7%	34.8%	—	80.7%
	Other Non hispanic		80	45	25	9	1	160
		Row Percent	50.3%	28.3%	15.7%	5.7%	.6%	100.6%
		Column Percent	1.0%	4.8%	3.2%	3.0%	—	1.6%
	No answer		281	41	43	12	290	667
		Row Percent	74.5%	10.9%	11.4%	3.2%	76.9%	176.9%
		Column Percent	3.4%	4.4%	5.5%	4.0%	—	6.5%
Total			8280	930	784	302	309	10605
	Row Percent		80.4%	9.0%	7.6%	2.9%	3.0%	103.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	—	103.0%

Table 10.7.1

ALL RESPONDENTS
by REGION and AGE
1999 Survey of ACS Members

			AGE							
			20-29	30-39	40-49	50-59	60-69	70 years	No answer	Total
GEOGRAPHIC REGION	Pacific		91	383	383	336	115	3	11	1322
		Row Percent	6.9%	29.0%	29.0%	25.4%	8.7%	.2%	.8%	100.0%
		Column Percent	11.6%	13.9%	12.6%	12.3%	12.2%	60.0%	3.2%	12.5%
	Mountain		46	128	154	144	29	0	0	501
		Row Percent	9.2%	25.5%	30.7%	28.7%	5.8%	.0%	.0%	100.0%
		Column Percent	5.9%	4.6%	5.1%	5.3%	3.1%	.0%	.0%	4.7%
	West North Central		58	191	210	179	62	0	4	704
		Row Percent	8.2%	27.1%	29.8%	25.4%	8.8%	.0%	.6%	100.0%
		Column Percent	7.4%	6.9%	6.9%	6.5%	6.6%	.0%	1.2%	6.6%
	West South Central		51	204	213	247	68	0	6	789
		Row Percent	6.5%	25.9%	27.0%	31.3%	8.6%	.0%	.8%	100.0%
		Column Percent	6.5%	7.4%	7.0%	9.0%	7.2%	.0%	1.7%	7.4%
	East North Central		168	482	582	496	146	0	11	1885
		Row Percent	8.9%	25.6%	30.9%	26.3%	7.7%	.0%	.6%	100.0%
		Column Percent	21.5%	17.5%	19.2%	18.1%	15.5%	.0%	3.2%	17.8%
	East South Central		28	69	129	104	26	0	4	360
		Row Percent	7.8%	19.2%	35.8%	28.9%	7.2%	.0%	1.1%	100.0%
		Column Percent	3.6%	2.5%	4.2%	3.8%	2.8%	.0%	1.2%	3.4%
	Middle Atlantic		132	559	603	531	202	1	18	2046
		Row Percent	6.5%	27.3%	29.5%	26.0%	9.9%	.0%	.9%	100.0%
		Column Percent	16.9%	20.3%	19.8%	19.4%	21.5%	20.0%	5.2%	19.3%
	South Atlantic		116	424	500	466	167	0	20	1693
		Row Percent	6.9%	25.0%	29.5%	27.5%	9.9%	.0%	1.2%	100.0%
		Column Percent	14.8%	15.4%	16.5%	17.0%	17.7%	.0%	5.8%	16.0%
	New England		74	260	216	173	75	0	3	801
		Row Percent	9.2%	32.5%	27.0%	21.6%	9.4%	.0%	.4%	100.0%
		Column Percent	9.5%	9.4%	7.1%	6.3%	8.0%	.0%	.9%	7.6%
	No answer		19	53	49	63	51	1	268	504
		Row Percent	3.8%	10.5%	9.7%	12.5%	10.1%	.2%	53.2%	100.0%
		Column Percent	2.4%	1.9%	1.6%	2.3%	5.4%	20.0%	77.7%	4.8%
Total			783	2753	3039	2739	941	5	345	10605
	Row Percent		7.4%	26.0%	28.7%	25.8%	8.9%	.0%	3.3%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.8.1

ALL RESPONDENTS
by FUNCTION and REGION
1999 Survey of ACS Members

			GEOGRAPHIC REGION										
			Pacific	Mountain	West North Central	West South Central	East North Central	East South Central	Middle Atlantic	South Atlantic	New England	No answer	Total
WORK FUNCTION	Analytical services		104	55	78	101	203	38	200	151	50	14	994
		Row Percent	10.5%	5.5%	7.8%	10.2%	20.4%	3.8%	20.1%	15.2%	5.0%	1.4%	100.0%
		Column Percent	7.9%	11.0%	11.1%	12.8%	10.8%	10.6%	9.8%	8.9%	6.2%	2.8%	9.4%
	Chemical info		10	4	5	3	25	1	24	19	5	3	99
		Row Percent	10.1%	4.0%	5.1%	3.0%	25.3%	1.0%	24.2%	19.2%	5.1%	3.0%	100.0%
		Column Percent	.8%	.8%	.7%	.4%	1.3%	.3%	1.2%	1.1%	.6%	.6%	.9%
	Computers		17	6	6	6	13	1	16	11	7	0	83
		Row Percent	20.5%	7.2%	7.2%	7.2%	15.7%	1.2%	19.3%	13.3%	8.4%	.0%	100.0%
		Column Percent	1.3%	1.2%	.9%	.8%	.7%	.3%	.8%	.6%	.9%	.0%	.8%
	Consulting		49	8	11	25	26	8	58	39	22	5	251
		Row Percent	19.5%	3.2%	4.4%	10.0%	10.4%	3.2%	23.1%	15.5%	8.8%	2.0%	100.0%
		Column Percent	3.7%	1.6%	1.6%	3.2%	1.4%	2.2%	2.8%	2.3%	2.7%	1.0%	2.4%
	Forensics		9	5	6	10	24	1	9	20	1	0	85
		Row Percent	10.6%	5.9%	7.1%	11.8%	28.2%	1.2%	10.6%	23.5%	1.2%	.0%	100.0%
		Column Percent	.7%	1.0%	.9%	1.3%	1.3%	.3%	.4%	1.2%	.1%	.0%	.8%
	General mgmt		59	22	29	46	80	20	82	104	36	6	484
		Row Percent	12.2%	4.5%	6.0%	9.5%	16.5%	4.1%	16.9%	21.5%	7.4%	1.2%	100.0%
		Column Percent	4.5%	4.4%	4.1%	5.8%	4.2%	5.6%	4.0%	6.1%	4.5%	1.2%	4.6%
	Health & Safety		47	7	22	14	37	11	60	79	23	3	303
		Row Percent	15.5%	2.3%	7.3%	4.6%	12.2%	3.6%	19.8%	26.1%	7.6%	1.0%	100.0%
		Column Percent	3.6%	1.4%	3.1%	1.8%	2.0%	3.1%	2.9%	4.7%	2.9%	.6%	2.9%
	Marketing, sales		35	10	19	46	77	14	79	73	37	5	395
		Row Percent	8.9%	2.5%	4.8%	11.6%	19.5%	3.5%	20.0%	18.5%	9.4%	1.3%	100.0%
		Column Percent	2.6%	2.0%	2.7%	5.8%	4.1%	3.9%	3.9%	4.3%	4.6%	1.0%	3.7%
	Patents		7	2	3	2	12	1	17	26	8	0	78
		Row Percent	9.0%	2.6%	3.8%	2.6%	15.4%	1.3%	21.8%	33.3%	10.3%	.0%	100.0%
		Column Percent	.5%	.4%	.4%	.3%	.6%	.3%	.8%	1.5%	1.0%	.0%	.7%

Table 10.8.1 continued

ALL RESPONDENTS
by FUNCTION and REGION
1999 Survey of ACS Members

			GEOGRAPHIC REGION										
			Pacific	Mountain	West North Central	West South Central	East North Central	East South Central	Middle Atlantic	South Atlantic	New England	No answer	Total
WORK FUNCTION	Production, QC		102	17	50	65	141	32	140	106	40	11	704
		Row Percent	14.5%	2.4%	7.1%	9.2%	20.0%	4.5%	19.9%	15.1%	5.7%	1.6%	100.0%
		Column Percent	7.7%	3.4%	7.1%	8.2%	7.5%	8.9%	6.8%	6.3%	5.0%	2.2%	6.6%
	Applied Research		318	127	163	157	455	58	553	385	216	10	2442
		Row Percent	13.0%	5.2%	6.7%	6.4%	18.6%	2.4%	22.6%	15.8%	8.8%	.4%	100.0%
		Column Percent	24.1%	25.3%	23.2%	19.9%	24.1%	16.1%	27.0%	22.7%	27.0%	2.0%	23.0%
	Basic Research		103	29	27	29	129	22	168	117	64	7	695
		Row Percent	14.8%	4.2%	3.9%	4.2%	18.6%	3.2%	24.2%	16.8%	9.2%	1.0%	100.0%
		Column Percent	7.8%	5.8%	3.8%	3.7%	6.8%	6.1%	8.2%	6.9%	8.0%	1.4%	6.6%
	R&D mgmt		108	32	47	46	163	26	186	141	84	4	837
		Row Percent	12.9%	3.8%	5.6%	5.5%	19.5%	3.1%	22.2%	16.8%	10.0%	.5%	100.0%
		Column Percent	8.2%	6.4%	6.7%	5.8%	8.6%	7.2%	9.1%	8.3%	10.5%	.8%	7.9%
	Training		19	10	9	14	29	13	27	18	11	0	150
		Row Percent	12.7%	6.7%	6.0%	9.3%	19.3%	8.7%	18.0%	12.0%	7.3%	.0%	100.0%
		Column Percent	1.4%	2.0%	1.3%	1.8%	1.5%	3.6%	1.3%	1.1%	1.4%	.0%	1.4%
	Other function		50	22	28	40	66	17	70	76	30	5	404
		Row Percent	12.4%	5.4%	6.9%	9.9%	16.3%	4.2%	17.3%	18.8%	7.4%	1.2%	100.0%
		Column Percent	3.8%	4.4%	4.0%	5.1%	3.5%	4.7%	3.4%	4.5%	3.7%	1.0%	3.8%
	No answer		285	145	201	185	405	97	357	328	167	431	2601
		Row Percent	11.0%	5.6%	7.7%	7.1%	15.6%	3.7%	13.7%	12.6%	6.4%	16.6%	100.0%
		Column Percent	21.6%	28.9%	28.6%	23.4%	21.5%	26.9%	17.4%	19.4%	20.8%	85.5%	24.5%
Total			1322	501	704	789	1885	360	2046	1693	801	504	10605
	Row Percent		12.5%	4.7%	6.6%	7.4%	17.8%	3.4%	19.3%	16.0%	7.6%	4.8%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.9.1

ALL RESPONDENTS
by WORK SPECIALTY and REGION
1999 Survey of ACS Members

			GEOGRAPHIC REGION										
			Pacific	Mountain	West North Central	West South Central	East North Central	East South Central	Middle Atlantic	South Atlantic	New England	No answer	Total
WORK SPECIALTY	Chemical engineering		47	22	27	68	71	21	86	65	31	26	464
		Row Percent	10.1%	4.7%	5.8%	14.7%	15.3%	4.5%	18.5%	14.0%	6.7%	5.6%	100.0%
		Column Percent	3.6%	4.4%	3.8%	8.6%	3.8%	5.8%	4.2%	3.8%	3.9%	5.2%	4.4%
	Ag/Food chemistry		30	9	47	8	63	10	55	68	11	18	319
		Row Percent	9.4%	2.8%	14.7%	2.5%	19.7%	3.1%	17.2%	21.3%	3.4%	5.6%	100.0%
		Column Percent	2.3%	1.8%	6.7%	1.0%	3.3%	2.8%	2.7%	4.0%	1.4%	3.6%	3.0%
	Analytical chemistry		202	87	114	157	314	66	317	292	123	61	1733
		Row Percent	11.7%	5.0%	6.6%	9.1%	18.1%	3.8%	18.3%	16.8%	7.1%	3.5%	100.0%
		Column Percent	15.3%	17.4%	16.2%	19.9%	16.7%	18.3%	15.5%	17.2%	15.4%	12.1%	16.3%
	Biochemistry		69	20	36	37	82	21	94	73	39	17	488
		Row Percent	14.1%	4.1%	7.4%	7.6%	16.8%	4.3%	19.3%	15.0%	8.0%	3.5%	100.0%
		Column Percent	5.2%	4.0%	5.1%	4.7%	4.4%	5.8%	4.6%	4.3%	4.9%	3.4%	4.6%
	Biotechnology		78	11	9	14	41	4	45	40	32	9	283
		Row Percent	27.6%	3.9%	3.2%	4.9%	14.5%	1.4%	15.9%	14.1%	11.3%	3.2%	100.0%
		Column Percent	5.9%	2.2%	1.3%	1.8%	2.2%	1.1%	2.2%	2.4%	4.0%	1.8%	2.7%
	Chemical education		81	41	65	44	117	34	105	83	39	32	641
		Row Percent	12.6%	6.4%	10.1%	6.9%	18.3%	5.3%	16.4%	12.9%	6.1%	5.0%	100.0%
		Column Percent	6.1%	8.2%	9.2%	5.6%	6.2%	9.4%	5.1%	4.9%	4.9%	6.3%	6.0%
	Clinical chemistry		17	3	10	7	21	1	7	17	9	9	101
		Row Percent	16.8%	3.0%	9.9%	6.9%	20.8%	1.0%	6.9%	16.8%	8.9%	8.9%	100.0%
		Column Percent	1.3%	.6%	1.4%	.9%	1.1%	.3%	.3%	1.0%	1.1%	1.8%	1.0%
	Environmental chemistry		114	49	41	65	98	30	94	146	41	50	728
		Row Percent	15.7%	6.7%	5.6%	8.9%	13.5%	4.1%	12.9%	20.1%	5.6%	6.9%	100.0%
		Column Percent	8.6%	9.8%	5.8%	8.2%	5.2%	8.3%	4.6%	8.6%	5.1%	9.9%	6.9%
	General chemistry		31	10	22	23	63	10	59	48	19	15	300
		Row Percent	10.3%	3.3%	7.3%	7.7%	21.0%	3.3%	19.7%	16.0%	6.3%	5.0%	100.0%
		Column Percent	2.3%	2.0%	3.1%	2.9%	3.3%	2.8%	2.9%	2.8%	2.4%	3.0%	2.8%

Table 10.9.1 continued

ALL RESPONDENTS
by WORK SPECIALTY and REGION
1999 Survey of ACS Members

			GEOGRAPHIC REGION										
			Pacific	Mountain	West North Central	West South Central	East North Central	East South Central	Middle Atlantic	South Atlantic	New England	No answer	Total
WORK SPECIALTY	Inorganic chemistry		39	33	22	38	63	13	60	54	25	14	361
		Row Percent	10.8%	9.1%	6.1%	10.5%	17.5%	3.6%	16.6%	15.0%	6.9%	3.9%	100.0%
		Column Percent	3.0%	6.6%	3.1%	4.8%	3.3%	3.6%	2.9%	3.2%	3.1%	2.8%	3.4%
	Materials science		68	32	26	16	71	10	79	76	29	13	420
		Row Percent	16.2%	7.6%	6.2%	3.8%	16.9%	2.4%	18.8%	18.1%	6.9%	3.1%	100.0%
		Column Percent	5.1%	6.4%	3.7%	2.0%	3.8%	2.8%	3.9%	4.5%	3.6%	2.6%	4.0%
	Medicinal-Pharmaceutical		122	25	49	15	150	9	223	127	112	34	866
		Row Percent	14.1%	2.9%	5.7%	1.7%	17.3%	1.0%	25.8%	14.7%	12.9%	3.9%	100.0%
		Column Percent	9.2%	5.0%	7.0%	1.9%	8.0%	2.5%	10.9%	7.5%	14.0%	6.7%	8.2%
	Organic chemistry		116	50	74	88	200	35	275	149	85	52	1124
		Row Percent	10.3%	4.4%	6.6%	7.8%	17.8%	3.1%	24.5%	13.3%	7.6%	4.6%	100.0%
		Column Percent	8.8%	10.0%	10.5%	11.2%	10.6%	9.7%	13.4%	8.8%	10.6%	10.3%	10.6%
	Physical chemistry		78	20	32	38	93	11	73	69	39	20	473
		Row Percent	16.5%	4.2%	6.8%	8.0%	19.7%	2.3%	15.4%	14.6%	8.2%	4.2%	100.0%
		Column Percent	5.9%	4.0%	4.5%	4.8%	4.9%	3.1%	3.6%	4.1%	4.9%	4.0%	4.5%
	Polymer chemistry		67	19	50	66	199	40	196	139	68	49	893
		Row Percent	7.5%	2.1%	5.6%	7.4%	22.3%	4.5%	21.9%	15.6%	7.6%	5.5%	100.0%
		Column Percent	5.1%	3.8%	7.1%	8.4%	10.6%	11.1%	9.6%	8.2%	8.5%	9.7%	8.4%
	Other chemical science		25	13	17	26	54	11	60	39	12	17	274
		Row Percent	9.1%	4.7%	6.2%	9.5%	19.7%	4.0%	21.9%	14.2%	4.4%	6.2%	100.0%
		Column Percent	1.9%	2.6%	2.4%	3.3%	2.9%	3.1%	2.9%	2.3%	1.5%	3.4%	2.6%
	Business Administration		19	11	16	23	47	10	50	51	24	18	269
		Row Percent	7.1%	4.1%	5.9%	8.6%	17.5%	3.7%	18.6%	19.0%	8.9%	6.7%	100.0%
		Column Percent	1.4%	2.2%	2.3%	2.9%	2.5%	2.8%	2.4%	3.0%	3.0%	3.6%	2.5%
	Computer science		25	10	7	8	20	2	21	15	9	2	119
		Row Percent	21.0%	8.4%	5.9%	6.7%	16.8%	1.7%	17.6%	12.6%	7.6%	1.7%	100.0%
		Column Percent	1.9%	2.0%	1.0%	1.0%	1.1%	.6%	1.0%	.9%	1.1%	.4%	1.1%

Table 10.9.1 continued

ALL RESPONDENTS
by WORK SPECIALTY and REGION
1999 Survey of ACS Members

			GEOGRAPHIC REGION										
			Pacific	Mountain	West North Central	West South Central	East North Central	East South Central	Middle Atlantic	South Atlantic	New England	No answer	Total
WORK SPECIALTY	Law		8	5	5	3	13	3	15	22	7	3	84
		Row Percent	9.5%	6.0%	6.0%	3.6%	15.5%	3.6%	17.9%	26.2%	8.3%	3.6%	100.0%
		Column Percent	.6%	1.0%	.7%	.4%	.7%	.8%	.7%	1.3%	.9%	.6%	.8%
	Other nonchemistry		83	31	32	42	102	18	123	114	44	40	629
		Row Percent	13.2%	4.9%	5.1%	6.7%	16.2%	2.9%	19.6%	18.1%	7.0%	6.4%	100.0%
		Column Percent	6.3%	6.2%	4.5%	5.3%	5.4%	5.0%	6.0%	6.7%	5.5%	7.9%	5.9%
	No answer		3	0	3	3	3	1	9	6	3	5	36
		Row Percent	8.3%	.0%	8.3%	8.3%	8.3%	2.8%	25.0%	16.7%	8.3%	13.9%	100.0%
		Column Percent	.2%	.0%	.4%	.4%	.2%	.3%	.4%	.4%	.4%	1.0%	.3%
Total			1322	501	704	789	1885	360	2046	1693	801	504	10605
	Row Percent		12.5%	4.7%	6.6%	7.4%	17.8%	3.4%	19.3%	16.0%	7.6%	4.8%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 10.10.1

ALL RESPONDENTS
by REGION and SEX
1999 Survey of ACS Members

			SEX			
			Men	Women	No answer	Total
GEOGRAPHIC REGION	Pacific		1000	309	13	1322
		Row Percent	75.6%	23.4%	1.0%	100.0%
		Column Percent	12.6%	13.3%	3.6%	12.5%
	Mountain		387	110	4	501
		Row Percent	77.2%	22.0%	.8%	100.0%
		Column Percent	4.9%	4.7%	1.1%	4.7%
	West North Central		546	149	9	704
		Row Percent	77.6%	21.2%	1.3%	100.0%
		Column Percent	6.9%	6.4%	2.5%	6.6%
	West South Central		634	150	5	789
		Row Percent	80.4%	19.0%	.6%	100.0%
		Column Percent	8.0%	6.5%	1.4%	7.4%
	East North Central		1467	401	17	1885
		Row Percent	77.8%	21.3%	.9%	100.0%
		Column Percent	18.5%	17.3%	4.7%	17.8%
	East South Central		277	81	2	360
		Row Percent	76.9%	22.5%	.6%	100.0%
		Column Percent	3.5%	3.5%	.6%	3.4%
	Middle Atlantic		1566	458	22	2046
		Row Percent	76.5%	22.4%	1.1%	100.0%
		Column Percent	19.8%	19.7%	6.1%	19.3%
	South Atlantic		1287	388	18	1693
		Row Percent	76.0%	22.9%	1.1%	100.0%
		Column Percent	16.3%	16.7%	5.0%	16.0%
	New England		622	175	4	801
		Row Percent	77.7%	21.8%	.5%	100.0%
		Column Percent	7.9%	7.5%	1.1%	7.6%
	No answer		134	102	268	504
		Row Percent	26.6%	20.2%	53.2%	100.0%
		Column Percent	1.7%	4.4%	74.0%	4.8%
Total			7920	2323	362	10605
	Row Percent		74.7%	21.9%	3.4%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%

Table 10.11.1

ALL RESPONDENTS
by REGION and HIGHEST DEGREE
1999 Survey of ACS Members

			HIGHEST DEGREE				
			BA-BS	MS	PhD	4.00	Total
GEOGRAPHIC REGION	Pacific		264	212	830	16	1322
		Row Percent	20.0%	16.0%	62.8%	1.2%	100.0%
		Column Percent	11.0%	11.2%	13.4%	12.7%	12.5%
	Mountain		112	73	310	6	501
		Row Percent	22.4%	14.6%	61.9%	1.2%	100.0%
		Column Percent	4.7%	3.9%	5.0%	4.8%	4.7%
	West North Central		173	115	412	4	704
		Row Percent	24.6%	16.3%	58.5%	.6%	100.0%
		Column Percent	7.2%	6.1%	6.6%	3.2%	6.6%
	West South Central		202	124	453	10	789
		Row Percent	25.6%	15.7%	57.4%	1.3%	100.0%
		Column Percent	8.4%	6.6%	7.3%	7.9%	7.4%
	East North Central		480	356	1033	16	1885
		Row Percent	25.5%	18.9%	54.8%	.8%	100.0%
		Column Percent	20.1%	18.9%	16.7%	12.7%	17.8%
	East South Central		99	55	199	7	360
		Row Percent	27.5%	15.3%	55.3%	1.9%	100.0%
		Column Percent	4.1%	2.9%	3.2%	5.6%	3.4%
	Middle Atlantic		401	399	1223	23	2046
		Row Percent	19.6%	19.5%	59.8%	1.1%	100.0%
		Column Percent	16.8%	21.1%	19.7%	18.3%	19.3%
	South Atlantic		377	304	987	25	1693
		Row Percent	22.3%	18.0%	58.3%	1.5%	100.0%
		Column Percent	15.8%	16.1%	15.9%	19.8%	16.0%
	New England		154	138	501	8	801
		Row Percent	19.2%	17.2%	62.5%	1.0%	100.0%
		Column Percent	6.4%	7.3%	8.1%	6.3%	7.6%
	No answer		130	111	252	11	504
		Row Percent	25.8%	22.0%	50.0%	2.2%	100.0%
		Column Percent	5.4%	5.9%	4.1%	8.7%	4.8%
Total			2392	1887	6200	126	10605
	Row Percent		22.6%	17.8%	58.5%	1.2%	100.0%
	Column Percent		100.0%	100.0%	100.0%	100.0%	100.0%

AMERICAN CHEMICAL SOCIETY

1999 Comprehensive Salary and Employment Status Survey

Please complete and return as soon as possible in the envelope provided.
Thank you for your participation.

MARKING INSTRUCTIONS
- Use a No. 2 pencil or blue or black ink pen only.
- Do not use felt tip pens.
- Fill the oval completely.
- Do not make stray marks on this form.

INCORRECT MARKS ⊘ ⊗ ◐ ⬭
CORRECT MARK ●

I. EDUCATION AND EMPLOYMENT STATUS

1. What is the highest degree you have received to date? Fill in one.

- Less than Bachelor's
- Bachelor's
- Master's
- Doctorate
- Other (specify) _____

2. Please indicate the year for each degree you have earned.

	Bachelor's	Master's	Doctorate
19	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9
	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9

3. Please indicate the one field of the highest degree you have earned and the one specialty most related to your current or most recent job using the appropriate column below. Fill in one response for each column.

	One field of degree	One work specialty
Chemical engineering		
Agricultural/food chemistry		
Analytical chemistry		
Biochemistry		
Biotechnology		
Chemical education		
Clinical chemistry		
Environmental chemistry		
General chemistry		
Inorganic chemistry		
Materials science		
Medicinal/pharmaceutical chemistry		
Organic chemistry		
Physical chemistry		
Polymer chemistry		
Other chemical science		
Business administration		
Computer science		
Law		
Other non-chemistry		

4. Please indicate your primary employment status as of March 1, 1999. Choose the one category that best fits your situation.

- Employed full-time (35 hours or more per week) — Go to 5
- Employed part-time — Go to 5
- Postdoctoral or other fellowship — Go to 5
- Not employed but actively seeking employment — Go to 7
- Not employed and not seeking employment — Go to 28
- Fully retired — Stop Here and Return Survey

5. If you are currently employed, how long have you worked for your current employer? Fill in one.

- Less than 1 year
- 1 to 4 years
- 5 to 9 years
- 10 to 19 years
- 20 or more years

6. If you are currently employed, is your job permanent or temporary? Fill in one.

- Permanent - Go to 8
- Temporary - Go to 8
- Agency temp - Go to 8
- Fixed term contract - Go to 8

7. If you were not employed but actively seeking employment on March 1, 1999, how long had you been unemployed? Fill in one.

- Less than 1 month
- 1 to 3 months
- 4 to 6 months
- 7 to 12 months
- More than 1 year

8. Regardless of your current status, was there any period when you were not employed but actively seeking employment in calendar year 1998? Fill in one.

- Yes
- No – Go to 9

If yes, how many total months were you not employed but actively seeking employment in calendar year 1998? Fill in one.

- Less than 1 month
- 1 to 3 months
- 4 to 6 months
- 7 to 11 months
- 12 months

9. What are the first three digits of the zip code of your current or most recent place of employment?

0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9

DO NOT MARK IN THIS AREA

33150

24. Employer's approximate number of employees (total for the whole organization):

- Less than 50
- 50 to 99
- 100 to 499
- 500 to 2,499
- 2,500 to 9,999
- 10,000 to 24,999
- 25,000 or more

25. Please indicate the one work function that best describes your job: Fill in one.

- Analytical services, other than forensics
- Chemistry information services
- Computer programming, analysis, design
- Consulting
- Forensic analysis
- General management or administration (other than R&D)
- Health and safety/regulatory affairs
- Marketing, sales, purchasing, technical service, economic evaluation
- Patents, licensing, trademarks
- Production, quality control
- Research and Development:
  - Applied research, development, design
  - Basic research
  - Management or administration of R&D
- Training or teaching
- Other (specify) _____

26. How is your job classified? Fill in one.

- Manager or administrator
- Scientist or engineer
- Chemical or engineering technician
- Other (specify) _____

27. How many people do you supervise, directly or indirectly? Fill in all that apply.

Scientist or engineer

0	10-14	50 or more
1-2	15-29	
3-9	30-49	

Chemical or engineering technician

0	10-14	50 or more
1-2	15-29	
3-9	30-49	

Others, including production workers

0	10-14	50 or more
1-2	15-29	
3-9	30-49	

IV. QUESTIONS ABOUT YOURSELF

28. What is your sex?

Male Female

29. What is your age on March 1, 1999? AGE →

0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

30. What is your citizenship or visa status? Fill in on

- U.S. native
- U,S. naturalized
- U.S. permanent resident visa
- Other visa

31. Are you of Hispanic origin or descent?

Yes No

32. What is your background? Fill in one.

- American Indian or Alaskan Native
- Asian or Pacific Islander
- Black
- White
- Other

Please provide any additional comments.

THANK YOU FOR YOUR PARTICIPATION.
PLEASE RETURN THIS QUESTIONNAIRE IN THE ENVELOPE PROVIDED

III. CURRENT OR MOST RECENT PRIMARY JOB

If your most recent employer is not or was not an academic institution, go to section III. B.

A. Academic employer.

7. Please indicate your current or most recent primary academic employer: Fill in one.

College or university excluding medical schools where the highest degree offered in chemistry or chemical engineering is:

- ○ Associate's
- ○ Bachelor's
- ○ Master's
- ○ Doctorate

- ○ University medical or professional school
- ○ High school
- ○ Other academic, please specify _____

What is or was your academic employer? Fill in one.

○ Public institution ○ Private institution

What is or was your academic rank? Fill in one.

- ○ Full professor
- ○ Associate professor
- ○ Assistant professor
- ○ Visiting or adjunct professor, instructor, lecturer
- ○ Non-teaching research appointment
- ○ Other non-faculty
- ○ My institution does not have ranks
- ○ Secondary Teacher

Have or had you been granted tenure? Fill in one.

- ○ Yes
- ○ Not tenured, in tenure track
- ○ Not tenured, not in tenure track
- ○ Not Applicable

What is or was your basic contract period? Fill in one.

○ 9 or 10 months ○ 11 or 12 months

22. About what fraction of your total working time in your contract period is or was devoted to: Fill in all that apply.

Teaching		
○ 1-25%	○ 34-50%	○ 67-75%
○ 26-33%	○ 51-66%	○ 76-100%
Research		
○ 1-25%	○ 34-50%	○ 67-75%
○ 26-33%	○ 51-66%	○ 76-100%
Administration		
○ 1-25%	○ 34-50%	○ 67-75%
○ 26-33%	○ 51-66%	○ 76-100%
Other		
○ 1-25%	○ 34-50%	○ 67-75%
○ 26-33%	○ 51-66%	○ 76-100%

Go to 28.

B. Non-academic employer.

23. Please indicate current or most recent principal employer: Fill in one.

- ○ **Self-employed**

Non-manufacturing:

- ○ Analytical service laboratory
- ○ Contract research firm
- ○ Utility company
- ○ Other non-manufacturing, please specify _____

Manufacturing company primarily involved in:

- ○ Aerospace
- ○ Agricultural chemicals
- ○ Basic commodity chemicals
- ○ Biochemical products
- ○ Building materials
- ○ Coatings/paints/inks
- ○ Electronics/computers/semiconductors
- ○ Food
- ○ Instruments
- ○ Medical devices/diagnostic products
- ○ Metals/minerals
- ○ Paper
- ○ Personal care
- ○ Petroleum/natural gas
- ○ Pharmaceuticals
- ○ Plastics
- ○ Rubber
- ○ Soaps/detergents/surfactants
- ○ Specialty/fine chemicals
- ○ Textiles
- ○ Other manufacturing, please specify _____

Government:

- ○ Federal (civilian)
- ○ Military
- ○ State or local
- ○ Other government

Other non-academic employer:

- ○ Hospital or independent laboratory
- ○ Non-profit organization, other research institution
- ○ Other non-academic, please specify _____

II. CURRENT INCOME AND JOB EVALUATION

- **If you are employed, either full-time or part-time, please answer current income and job evaluation.**

— OR —

- **If you are not currently employed, please go to section III.**

In filling out questions, please follow example below:

10. What was your base annual salary from your primary employer as of March 1, 1999? Do not include bonuses, earnings from second employer, overtime work, summer teaching, or other supplemental earnings. If on a 9 or 10 month contract, report the 9 or 10 month salary rather than an annualized salary. If none, enter zero.

EXAMPLE:

$ 4,732.99 Annual As of 3/1/99

$ Annual As of 3/1/99

11. What was your base annual salary from your primary employer as of March 1, 1998? Do not include bonuses, earnings from second employer, overtime work, summer teaching, or other supplemental earnings. If on a 9 or 10 month contract, report the 9 or 10 month salary rather than an annualized salary. If none, enter zero.

$ Annual As of 3/1/98

12. What was your total professional income during calendar year 1998? Include consulting fees, base annual salary, bonuses, earnings from second employer, overtime, summer teaching, and other supplemental earnings.

$ Calendar Year 1998

13. Were you eligible for bonus during calendar year 19

○ Yes ○ No – Go to 14

If Yes, did you receive a bonus?

○ Yes ○ No – Go to 14

If Yes, please indicate amount $ C

14. Did you do any consulting in 1998? Fill in one.

○ Yes ○ No — Go to Section III.

If yes, how many hours did you consult per month? Fill in one.

○ Less than 10 hrs ○ 20 - 39 hrs ○ 100 mor
○ 10 - 19 hrs ○ 40 - 99 hrs

15. If you did any consulting, what was your approxim hourly rate?

$ Per hour

16. What was your total consulting income during cale year 1998?

$ Cale Ye 19

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